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This Manual should be used in conjunction with the following publications:

RCL 0193ENG Workshop Manual

RCL 0194ENG Electrical Circuit Diagrams

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INTRODUCTION	1.1
References	
Battery voltage	1.2
Open circuit voltage test	1.2
ELECTRICAL PRECAUTIONS	1.3
General	
Battery disconnecting	1.4
Battery charging	
Disciplines	1.5
Grease for electrical connectors	
ABBREVIATIONS	1.6
HOW TO USE THIS DOCUMENT	1.8
WIRE COLOUR CODES	1.12
FUSE DETAILS	2.1
ENGINE COMPARTMENT FUSE BOX	2.1
PASSENGER COMPARTMENT FUSE BOX	
MODEL/FEATURE APPLICABILITY TABLE	2.4
EARTH POINTS AND HEADER JOINTS	3.1
Earth Points	3.1
Farth Headers	3.2

DESCRIPTION AND OPERATION	4.1
ANTI-THEFT ALARM OPERATION	4.1
Handset	4.1
Perimetric alarm	
Engine immobilisation	
Passive engine immobilisation	
Handset battery replacement	
Vehicle battery	
HORNS OPERATION	4.4
SUNROOF OPERATION	4.5
CHARGING AND STARTING SYSTEM OPERATION	4.6
Charging system	4.6
Starting system	4.7
MPI	
SPI	
MODULAR ENGINE MANAGEMENT SYSTEM (MEMS)	
PROGRAMMED IGNITION SYSTEM	4.9
MEMS ECM	
Crankshaft position (CKP) sensor	4.10
Camshaft position (CMP) sensor	
Manifold absolute pressure (MAP) sensor	4.10
Engine coolant temperature (ECT) sensor	4.11
Manifold heater (Japan only)	
Throttle position sensor	4.11
Idle speed control	4.11
FUEL INJECTION SYSTEM	
Idle air control valve (stepper motor)	4.13
Intake air temperature sensor	4.13
Catalytic Converter System	4.13
Heated oxygen sensor	
Purge valve	4.14
Automatic gearbox	4.14
Inhibitor switch	
FUEL PUMP OPERATION	4.15

BRAKE FLUID LEVEL WARNING OPERATION	4.16
Brake test switch	4.16
SRS (AIRBAG) OPERATION	4.17
Driver's airbag	
Pre-tensioners	4.18
SRS warning lamp	4.18
SEAT BELT WARNING OPERATION (JAPAN ONLY)	4.19
AIR CONDITIONING OPERATION (JAPAN)	4.21
MEMS ECM	4.21
Air conditioning switch and condenser fan	4.21
Aircon blower motor, switch and resistor pack	4.22
Dual pressure switch	4.22
HEATER BLOWER OPERATION	4.23
COOLING FAN OPERATION	4.24
MPI	4.24
SPI (Japan only)	
HEATED REAR WINDOW OPERATION	4.25
WINDSCREEN WIPERS AND WASHERS OPERATION	4.26
Intermittent wipe	4.26
Wiper normal speed	
Wiper fast speed	4.26
Single wipe	4.27
Wash/wipe	
Wiper motor park	4.27

EXTERIOR LIGHTS	4.28
Brake lamps operation	4.28
Reverse lamps operation	4.28
Head, side, tail and number plate lamps operation	4.29
Headlamps	4.29
Dipped beam	
Main beam	
Headlamp flash	
Side and tail lamps	
Number plate lamps	
Front fog and driving lamps operation	
Front fog lamps	
Driving lamps	
Front fog and driving lamps operation (Japan)	
Front fog lamps	
Driving lamps	
Rear fog lamps operation	
Headlamp levelling operation	
Headlamp levelling switch	4.34
INDICATORS AND HAZARD SYSTEM OPERATION	4.35
Indicators	4.35
Right	4.35
Left	4.35
Hazard warning	4 36

CONNECTOR	Indexed by connector number
IN-CAR ENTERTAINMENT OPERATION	4.42
Oil temperature gauge	4.41
Voltage gauge	
Tachometer	
Airbag warning lamp	
Main beam warning lamp	4.40
Indicator warning lamps	4.40
Oil pressure warning lamp	
Ignition/no charge warning lamp	4.40
Clock	
Fuel gauge	
Coolant temperature gauge	4.39
INSTRUMENT PACK OPERATION	4.39
INTERIOR ILLUMINATION	4.38
INTERIOR LAMP CIRCUIT OPERATION	1 27

This document is intended to assist in diagnosing electrical faults, and should be used in conjunction with the Electrical Circuit Diagrams. The document is divided into the following five sections:

- 1. **INTRODUCTION** includes Electrical Precautions, a list of Abbreviations and general information on how to use the document.
- 2. **FUSE DETAILS** provides details of location, rating in amps, wire colour and circuit(s) protected.
- 3. **EARTH POINTS AND HEADER JOINTS** provides details of earth points, earth and power header joints, including a plan view of the vehicle to aid location.
- 4. **DESCRIPTION AND OPERATION** provides an explanation of how each of the systems operate.
- 5. **CONNECTOR** details of connectors including a location photograph, face view and pin-out table.



NOTE: Before starting electrical checks on the vehicle, ensure that the relevant mechanical functions operate satisfactorily.

References

References to the LH or RH side given in this document are made when viewing the vehicle from the rear.

Operations covered in this document do not include reference to testing the vehicle after repair. It is essential that work is inspected and tested after completion and, if necessary, a road test of the vehicle undertaken, particularly where safety related items are concerned.

MINI 97MY 1.1



Caution: Before undertaking any electrical work on a vehicle ALWAYS read the ELECTRICAL PRECAUTIONS detailed on the next page.

Battery voltage

Before commencing diagnosis of electrical problems verify the condition of the battery is acceptable by using the open circuit voltage test.

Open circuit voltage test

Switch off all electrical loads on the vehicle.

Adjust digital multimeter to read d.c. volts on the appropriate scale.

Connect test probes across battery terminals ensuring that polarity is correct and record the voltage displayed.

A reading of 12.3V or more is acceptable; any battery which reads less than this will need charging.



NOTE: If the vehicle has been used within a period of 8 hours prior to the test, surface charge must be removed from the battery by switching the headlamps on for approximately 30 seconds.

Wait a further 60 seconds before checking the open circuit voltage.

Battery voltage is used as a known reference for ascertaining whether or not circuits are receiving sufficiently high voltage for components to function correctly. This reference is only a guide since most electronic circuits are designed to function over a wide range of voltages. In addition, consideration must be given to readings affected by voltage drop across certain components and fluctuations due to cable lengths.

1.2 MINI 97MY

ELECTRICAL PRECAUTIONS

General

The following guidelines are intended to ensure the safety of the operator whilst preventing damage to the electrical and electronic components fitted to the vehicle. Where necessary, specific precautions are detailed in the relevant sections of this document, reference to which should be made prior to commencing repair operations.

Equipment - Prior to commencing any test procedure on the vehicle ensure that the relevant test equipment is working correctly and any harness or connectors are in good condition. This particularly applies to mains lead and connections.



WARNING: Before commencing work on an ignition system all high tension terminals, adapters and diagnostic equipment for testing should be inspected to ensure that they are adequately

insulated and shielded to prevent accidental personal contact and to minimise the risk of shock. Wearers of surgically implanted pacemaker devices should not work in close proximity to ignition circuits or diagnostic equipment.

Polarity - Never reverse connect the vehicle battery and always observe the correct polarity when connecting test equipment.

High Voltage Circuits - Whenever disconnecting live ht circuits always use insulated pliers and never allow the open end of the ht lead to come into contact with other components particularly ECUs. Since high voltage spikes can occur on the terminals of the coil while the engine is running, exercise caution when measuring the voltage at these points.

MINI 97MY 1.3

Connectors and Harness - The engine compartment of a vehicle is a particularly hostile environment for electrical components and connectors. Always ensure these items are dry and oil free before disconnecting and connecting test equipment. Never force connectors apart either by using tools or by pulling on the wiring harness. Always ensure locking tabs are disengaged before removal and note orientation to enable correct reconnection. Ensure that any protective covers and substances are replaced if disturbed.

Before removing a faulty component, refer to the Workshop Manual for removal procedures. Ensure the starter switch is turned to the 'OFF' position, the battery is disconnected (see Battery disconnecting) and any disconnected harnesses are supported to avoid any undue strain at terminals. When replacing the component keep oily hands away from electrical connection areas and push connectors home until any locking tabs fully engage.

Battery disconnecting

Before disconnecting the battery, switch off all electrical equipment. If the radio is to be serviced, ensure the security code has been deactivated.



Caution: To prevent damage to electrical components ALWAYS disconnect the battery when working on the vehicle electrical system. The earth lead must be disconnected first and sted last. Always ensure that battery leads are routed correctly and

reconnected last. Always ensure that battery leads are routed correctly and are not close to any potential chafing points.

Battery charging

Recharge the battery out of the vehicle and keep the top well ventilated. While being charged or discharged, and for approximately fifteen minutes afterwards, batteries emit hydrogen gas. This gas is inflammable.

Always ensure any battery charging area is well ventilated and that every precautions is taken to avoid naked flames and sparks.

1.4 MINI 97MY

Disciplines

Switch off ignition prior to making any connection or disconnection in the system as electrical surge caused by disconnecting 'live' connections can damage electronic components.

Ensure hands and work surfaces are clean and free of grease, swarf, etc. as grease collects dirt which can cause tracking or high-resistance contacts.

When handling printed circuit boards, treat them as you would a disc - hold by the edges only; note that some electronic components are susceptible to body static.

Connectors should never be subjected to forced removal or refit, especially interboard connectors, damaged contacts will cause short-circuit and open-circuit conditions.

Prior to commencing test, and periodically during test, touch a good earth, i.e. cigar lighter socket, to discharge body static as some electronic components are vulnerable to static electricity.

Grease for electrical connectors

All under bonnet and under body connectors are protected against corrosion by the application of a special grease on production. Should connectors be disturbed in service or repaired or replaced, a grease of this type, available under Part No. BAU 5811, should again be applied.



NOTE: The use of other greases must be avoided as they can migrate into relays, switches etc. contaminating the contacts and leading to intermittent operation or failure.

MINI 97MY 1.5

ABBREVIATIONS

A - Amps

ac - Alternating current A/C or Aircon - Air conditioning

ABS - Anti-lock braking system

Cav - Cavity

Cct - Model or feature applicability

CDL - Central door locking

Col - Colour

dc - Direct current

DCU - Diagnostic and control unit ECU - Electronic control unit

ECM - Engine control module
EDC - Electronic diesel control

F - Fuse

FICV - Fast idle control valve

FL - Fusible link

HRW - Heated rear window
 IACV - Idle air control valve
 ICE - In-car entertainment
 IMA - Idle mixture adjust

1.6 MINI 97MY

LCD - Liquid crystal display LED - Light emitting diode

LH - Left hand

LHD - Left hand drive

MAP - Manifold absolute pressure

MEMS - Modular engine management system

MFU - Multi-function unit MPi - Multi-point injection

NON CDL - Without Central door locking

PA - Atmospheric pressure PGM-Fi - Programmed fuel injection

RH - Right hand

RHD - Right hand drive

SPi - Single-point fuel injection

SRS - Supplementary restraint system

TA - Air temperatureTDC - Top dead centreTH - Throttle angle

TW - Water temperature

MINI 97MY 1.7

HOW TO USE THIS DOCUMENT

Fuse details

Contains information on fuse functions and values and should be used together with the power distribution circuit diagrams to establish which systems share a common power supply and to ensure that correct value fuses are fitted.

Earth points and headers joints

Shows a plan view of the vehicle including location of all earth points. Supporting photographs and connector detail information appear in the Connector section.

Description and Operation

Presented in the same order as the circuit diagrams are displayed in the Electrical Circuit Diagram folder, each of the descriptions contains a brief overview of the main system functions and includes operating parameters for sensors and switches and reference to the appropriate wire colours. Always read this section before starting work on a system so that a good understanding of system functionality is obtained.

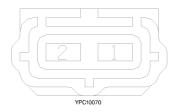
Connector

This section is effectively an index of every electrical connector on the vehicle, including header joints and eyelets. A page is dedicated to each connector, with the information presented in a standard format. The connector number is displayed on each page header to ease reference. Connector information comprises:

- Connector Number The assigned number, prefixed "C".
- Connector Name Usually derived from the component to which the connection is made.
- Male/Female If applicable, identifies the gender of the connector pins
 (NOT the housing) as Male or Female. Generally, connectors mating directly
 to a component have Female pins.

1.8 MINI 97MY

- Colour If applicable, the colour of the connector housing is shown.
 NATURAL is used to describe connectors with a clear/translucent plastic finish.
- **Location Statement** Used in conjunction with the photograph to determine the location of the connector.
- Photograph Shows the location of the subject connector. In most cases, the photograph will indicate the amount of trim removal necessary to reveal the connector. For convenience some photographs identify more than one connector.
- **Face View** An outline of the connector housing, viewed from the front, showing pin numbers (if applicable).



• **Pin-out Table** - A three column table, detailing the colour and position of each wire in the connector:

•

Cav	Col	Cct
1	GR	ALL
2	В	ALL

Cav: The connector pin (cavity) number.

Col: The colour of wire populating the connector pin.

Cct: Identifies the model or feature which uses the wire. ALL means

applicable to all vehicles in the range.

MINI 97MY 1.9

INTRODUCTION

Where necessary a table listing the circuit reference numbers against a description of the model or features which may or may not be fitted, can be found at the beginning of the Connector section. A sample of a typical table is shown below:

Cct	Model or feature
1	Electric windows
2	Electric windows and headlamp levelling
3	Headlamp levelling
4	Without headlamp levelling
5	Airbag
6	Without airbag
7	Alarm
8	Rear speakers

1.10 MINI 97MY

Fault diagnosis

When diagnosing an electrical fault follow the steps below:

- Read the circuit description appropriate to the reported fault to ensure a good understanding of circuit operation.
- 2. Study the power distribution, fuse details and earth distribution diagrams and identify other circuits which share fuses and/or earth points. Check whether these circuits operate correctly.
- 3. Using the photographs contained in the Connector section, locate a point on the circuit (approximately half way between supply and earth) which is easily accessible.
- 4. Check that the pin out details of the connector are correct and that the correct signals exist at the correct terminals.
- 5. Using the marker pen supplied (or other suitable non-permanent marker pen), mark the parts of the circuit you have verified.
- 6. Continue to the next point on the circuit which is easiest to access and repeat the above.
- 7. Continue this approach until a fault is found, rectify the fault and then verify that the circuit operates correctly.

MINI 97MY 1.11

WIRE COLOUR CODES

The following list contains the wire colour codes used on the vehicle harnesses and is intended to give an indication of the function or feature for which a particular colour of wire is normally used. These guidelines do not always apply to the wiring between components and the main harness.

Code	Colour	Function	
В	Black	Earth wire from a component to an earth tag. Black with a tracer is also usually an earth wire but the earth is switched by a control unit.	
G	Green	Ignition fused supply from passenger compartment fusebox: clock, instrument, indicators, electric mirrors	
K	Pink	Fused supply: central door locking	
LG	Light Green	Ignition auxiliary fused supply from passenger compartment fusebox: reverse lamps, brake lamps	
N	Brown	Battery supply - to ignition switch from fusible link 3 and 5	
0	Orange	Fused supply: central locking	
Р	Purple	Fused permanent supply - to interior lamps, radio cassette, clock, anti-theft alarm, electric aerial	
R	Red	Fused supply: sidelamps	
S	Slate (grey)	Fused supply: electric windows	
U	Blue	Fused supply: headlamps, cooling fans	
W	White	Ignition switched supply to passenger compartment fusebox	
Υ	Yellow	Ignition switched supply to passenger compartment fusebox	

1.12 MINI 97MY

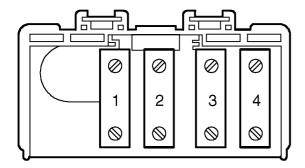
INTRODUCTION

The fuses are mounted in two fuse boxes; one is in the engine compartment and the other in the passenger compartment, high in the driver's footwell. In addition, the front fog lamp relay receives battery voltage via a 15A fuse (stand-alone fuse holder) mounted at the rear RH side of the engine compartment.

The engine compartment fuse box contains high current pull-out fuses which feed multiple circuits.

The fuses in the passenger compartment fuse box are all of the smaller pull-out type.

Engine Compartment Fuse Box

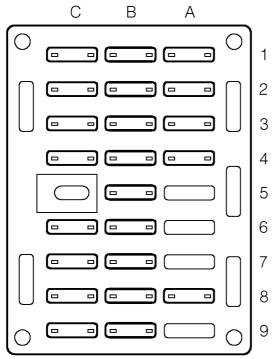


86M4220

Link	Rating	Wire Colour	Function
1	30 amp	N	Passenger compartment fuse box - fuses A9, B1,
	-		B6, B9 and C4
2	30 amp	N	Ignition switch, auxiliary relay
3	30 amp	N	Lighting switch
4	30 amp	N	MEMS relay module / manifold heater relay (Japan)

MINI 97MY 2.1

Passenger Compartment Fuse Box



86M4224

Fuse	Rating	Wire	Function
		Colour	
A1	10 amp	UW	RH headlamp main beam, driving lamp relay
A2	10 amp	UR	RH headlamp dipped beam
A3	10 amp	RW	RH side and tail lamps
A4	10 amp	W	Alarm ECU, instrument pack, voltage gauge, oil
			temperature gauge
A5	-	-	Not used
A6	10 amp	G	A/C relay, switch pack, thermostat, seat belt
			warning lamp, catalyst overheat ECU (Japan only)
A7	15 amp	LGW	A/C blower motor (Japan only)
A8	15 amp	LGO	Blower motor
A9	20 amp	U	A/C relay (Japan only)

2.2 MINI 97MY

B1	15 amp	Р	Driving lamp relay
B2	10 amp	UO	Rear fog guard
В3	10 amp	R	Headlamp levelling
B4	10 amp	LGW	Radio cassette, cooling fan relay (Japan), automatic gearbox selector indicator lamp
B5	10 amp	G	Airbag control unit
B6	20 amp	Р	Alarm system and horn
B7	15 amp	R	Sunroof
B8	15 amp	LGO	Wipers and washer
В9	15 amp	Р	Cooling fan
C1	10 amp	UW	LH headlamp main beam
C2	10 amp	UR	LH headlamp dipped beam
C3	10 amp	RB	LH side and tail lamps
C4	10 amp	PO	Radio cassette, clock, brake system warning light, direction indicator/ hazard warning unit, anti-theft alarm indicator light, interior lamp unit
C5	-	-	Not used
C6	15 amp	G	Direction indicator relay, brake and reversing lamps
C7	10 amp	NS	Inertia fuel shutoff switch
C8	10 amp	WR- WK	MEMS relay module (starter relay)
C9	15 amp	G	Heated rear window

A face view of the of the passenger compartment fuse box is not shown in the Connector section of this document since it consists of single Lucars connected in accordance with the following table:

MINI 97MY 2.3

Cav	Col	CCT
A1-1	UW	ALL
A1-2	UW	ALL
A2-1	UR	ALL
A2-2	UR	ALL
A3-1	R	ALL
A3-2	RW	ALL
A4-1	W	ALL
A4-2	W	ALL
A6-1	W	1
A6-2	G	1
A7-1	LGW	1
A7-2	LGW	1
A8-1	LGW	ALL
A8-2	LGO	ALL
A9-1	Ζ	1
A9-2	J	1

Cav	Col	CCT
B1-1	Ν	ALL
B1-2	Р	ALL
B2-1	U	ALL
B2-2	UO	ALL
B3-1	R	ALL
B3-2	R	ALL
B4-1	LGW	ALL
B4-2	LGW	ALL
B5-1	W	ALL
B5-2	G	ALL
B6-1	Z	ALL
B6-2	Р	ALL
B7-1	Υ	ALL
B7-2	R	ALL
B8-1	LGW	ALL
B8-2	LGO	ALL
B9-1	Ν	ALL
B9-2	Р	ALL

Cav	Col	CCT
C1-1	UW	ALL
C1-2	UW	ALL
C2-1	UR	ALL
C2-2	UR	ALL
C3-1	R	ALL
C3-2	RB	ALL
C4-1	Z	ALL
C4-2	РО	ALL
C6-1	W	ALL
C6-2	G	ALL
C7-1	NS	ALL
C7-2	NS	ALL
C8-1	WR	ALL
C8-2	WR	ALL
C9-1	Υ	ALL
C9-2	G	ALL

MODEL/FEATURE APPLICABILITY TABLE

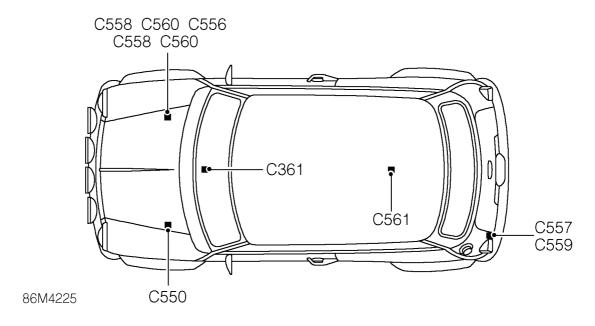
This table lists the circuit reference number(s) against a description of the model or feature to which it applies:

Cct	Model or feature applicability	
1	Japan only	
ALL	Applies to all models and derivatives	

2.4 MINI 97MY

Earth Points

The following illustration indicates the general position of each Earth Point on the vehicle.



Connector No	Title	Location
C361	Earth eyelet - radio	Behind centre of fascia
C556	Earth eyelet 1	RH side of engine compartment
C557	Earth eyelet 2	Luggage compartment - LH side
C558	Earth eyelet 3	RH side of engine compartment
C559	Earth eyelet 4	Luggage compartment - LH side
C560	Earth eyelet 5	RH side of engine compartment
C561	Earth eyelet 6	Beneath rear seat



NOTE: The earth points listed above, will not necessarily be fitted to all versions of the vehicle.

MINI 97MY 3.1

EARTH POINTS AND HEADER JOINTS

Earth Headers

There is one Earth Header attached to the inner wing abutment bracket located in the left hand side of the engine compartment.

Connector No	Title	Location
C550	Earth header 1	LH side of engine compartment

3.2 MINI 97MY

ANTI-THEFT ALARM OPERATION

The alarm system can only be armed and disarmed by using the handset



NOTE: Subsequent unlocking of the vehicle using the key will activate the alarm. Locking the driver's or front passenger's door with the key will NOT arm the alarm.

The system features:

- a perimetric alarm (protects access to the passenger, engine and luggage compartments).
- engine immobilisation.

Battery voltage to the alarm is supplied from fuse B6 in the passenger compartment fuse box on a P wire and earth is on a B wire. The alarm also receives battery voltage on a W wire from fuse A4 in the passenger compartment fuse box providing the starter switch is in position II. The anti-theft alarm indicator light receives battery voltage from fuse C4 in the passenger compartment fuse box on a PO wire and a control signal on a YN wire from the alarm ECU.

Handset

A coded radio signal is transmitted from the handset when either button is pressed. The RH (padlock symbol) button is used to arm the alarm and use of the LH button disarms it. Provided the handset is operated in the proximity of the vehicle, the signal is received on the aerial and passed to the alarm ECU on a WY wire.

When the alarm is armed, the anti-theft alarm indicator light flashes rapidly for approximately 10 seconds and then continues at a slower rate as a visual deterrent. If a door or the bonnet is not properly closed, the alarm will be armed and the engine immobilised. The anti-theft alarm indicator light will not flash for approximately 10 seconds, it will then flash slowly to indicate that the system is only partially armed and to provide a visual anti-theft deterrent. When the open door or the bonnet is closed, the alarm will become fully armed.

MINI 97MY 4.1

DESCRIPTION AND OPERATION

Each time the handset button is pressed, the radio signal code is changed in a sequence mirrored by the receiver in the alarm ECU. If the sequence is broken, (e.g. by handset battery renewal, or by temporary vehicle battery disconnection, etc.), it will be necessary to restore synchronisation. This can be done by pressing the handset RH button four times in quick succession, until the vehicle responds by arming the alarm.

Perimetric alarm

The perimetric alarm can only be set using the handset. Each door, the bonnet and the luggage compartment incorporates a switch that closes as the aperture is opened. When a switch is closed, an earth signal is sent to the alarm ECU on a PW wire for the driver and passenger doors, on a PK wire for the bonnet.

If a door is opened when the alarm is armed, the alarm ECU sends an earth on a PB wire to one side of the horn relay coil. Since the other side of the coil receives battery voltage on a P wire from fuse B6 in passenger compartment fuse box, the relay will energise causing the horn to sound. Once triggered, the horn will sound for a period of approximately 30 seconds - it can be silenced by pressing the plain button on the handset.

Engine immobilisation

The engine is immobilised when the perimetric alarm is set, inhibiting the engine primary electrical circuits. Immobilisation is removed when the LH handset button is pressed. The alarm ECU provides an earth on a WR wire (via the automatic inhibitor switch on a WLG wire in the case of vehicles fitted with an automatic gearbox) to one side of the starter relay coil. Since the other side of the coil is receiving battery voltage from fuse C8 the passenger compartment fuse box on a WR-WK wire, the relay is energised. Once this occurs, battery voltage is switched from link 4 in the engine compartment fuse box on an N wire via the MEMS relay module to the starter motor on an NR wire, with an immobilisation signal being sent to the MEMS ECM on a WS wire.

4.2 MINI 97MY

Passive engine immobilisation

Even if the car is not locked, the passive immobilisation feature will be enabled approximately 30 seconds after the starter switch is turned to the 'OFF' position and the driver's door has been opened. This state is indicated by the anti-theft alarm indicator light flashing. While the door is open, the anti-theft alarm indicator light illuminates continuously.

In this condition, the engine can be re-mobilised by pressing the LH button on the handset before operating the starter switch.

Handset battery replacement

Dependent on usage, the CR2032 type battery in the handset should last for three years. When the battery is near the end of its life, a reduction in the operating range of the handset may be noticed. To change the battery, first carefully prise open the handset casing at the key ring end, taking care not to damage the seal. Slide the battery out, without bending the clip or touching any of the contact surfaces. Press and hold each handset button for five seconds, to allow residual power to discharge.

Without touching the contact surfaces, carefully slide a new battery into the clip, ensuring that the side marked '+' faces the clip. Snap together the two halves of the handset case.

Unlock the car then operate the RH (lock symbol) button at least four times, to resynchronise the handset to the car. The handset is now ready for use.

Vehicle battery

Always disarm the alarm BEFORE the battery terminals are disconnected. Failure to do this will result in the alarm sounding as soon as the battery is reconnected.

MINI 97MY 4.3

HORNS OPERATION

The horn receives a direct earth on a B wire.

Battery voltage is supplied from fuse B6 in the passenger compartment fuse box on a P wire to the horn relay contacts and one side of the coil. When the horn push switch is operated the other side of the relay coil receives an earth on a PB wire via the rotary coupler. The alarm ECU will also supply an earth path to the horn relay coil on a PB wire when the integrity of the alarm system is broken.

When the relay coil receives the earth it is energised, switching battery voltage from B6 in the passenger compartment fuse box on a P wire via the closed contacts of the relay to the horn on a PB wire. Since the other side of the horn is connected to earth, the horn will sound.

4.4 MINI 97MY

SUNROOF OPERATION

The sunroof switches receive an earth supply on an N wire and, providing the starter switch is in position I or II, battery voltage is supplied on an R wire from fuse B7 in the passenger compartment fuse box. Operating the rear-mounted switch causes the sunroof to open, and operating the front-mounted switch causes the sunroof to close.

The sunroof motor operation and hence sunroof movement is controlled by operation of these switches. When the sunroof is in the closed position, the two switches provide an earth path to both motor terminals on B and S wires.

Operation of switch I supplies battery voltage on a B wire to one of the terminals of the sunroof motor. Since the second terminal is connected on a S wire to earth, the motor will operate and will continue until the switch is released.

Operation of switch II supplies battery voltage on a S wire to the second terminal of the sunroof motor. Since the first terminal is connected on a B wire to earth the motor will operate, and will continue until the switch is released.

MINI 97MY 4.5

CHARGING AND STARTING SYSTEM OPERATION

Charging system

The charging system is an alternator that contains a rectifier pack and regulator to maintain a constant direct current (dc) voltage in the system. The alternator has a fixed coil wound stator in which a field coil rotor rotates. Slip rings conduct current to and from the field coils via two carbon brushes. The unit is machine sensed, the regulator senses output voltage and regulates this to a maximum of 14 volts. The alternator is belt driven from the crankshaft and cooled by a fan mounted behind the pulley.

When the starter switch is switched on, a small current flows through the ignition/no charge warning lamp then to the field windings, partially magnetising the rotor and then passes to earth via the brushes and regulator. The warning lamp circuit is complete and the bulb glows. When the engine is started, the magnetised rotor turns within the stator windings generating 3-phase alternating current (ac) and voltage that rises rapidly with rotor speed. The rotor produces ac by virtue of the magnetic field of the rotor relative to the stator.

The field diodes in the rectifier pack convert the full wave ac current into dc. Output current from the field diodes supplements the initial current flowing through the field windings, causing an increase in the magnetic influence of the rotor resulting in self-excitation of the alternator. The field current increases with rotor speed and thus increases generated current and voltage until the alternator is fully-excited.

When the voltage applied to the alternator side of the warning lamp exceeds battery voltage the warning lamp is extinguished indicating that the alternator is developing battery-charging current. The regulator functions as an electronic control switch on the earth side of the field coils, rapidly switching the earth circuit OFF and ON to maintain the maximum voltage and thus the current to safe limits.

When the battery is in a low stage of charge or the current draw from electrical units causes voltage drop, the alternator automatically charges at its maximum rate (dependent on speed) until 14 volts is reached. When the demand on the alternator falls, the current output is reduced.

4.6 MINI 97MY

Starting system

When the starter switch is turned to the crank position, battery voltage is switched via fuse C8 in the passenger compartment fuse box to one side of the starter relay coil on a WR-WK wire. The other side of the coil is earthed differently dependent on model:

MPI

Manual vehicles receive an earth from the alarm ECU on a WR wire; Automatic vehicles receive an earth on a WLG wire via the automatic inhibitor switch from the alarm ECU on a WR wire.

SPI

Manual vehicles are earthed directly on a B wire;

Automatic vehicles are earthed on a WLG wire via the automatic inhibitor switch and a B wire.

When the starter relay is energised, battery voltage on an N wire from link 4 in the engine compartment fuse box is switched to the starter motor solenoid on an NR wire. Since the other side of the starter relay is connected to earth, the starter solenoid energises and applies direct battery voltage on an R wire (MPI only) or a B wire (SPI only) to the starter motor. Earth to the starter motor is via the mountings.

MINI 97MY 4.7

MODULAR ENGINE MANAGEMENT SYSTEM (MEMS)

MEMS is controlled by the MEMS control unit (ECM) which is located in the RH front corner of the engine compartment or on the RH inner wing valance, according to model.

The ECM is an adaptive unit, which means that, over a period of time, it can 'learn' the load and wear characteristics of the engine. Because no two engines have identical characteristics, this information is needed by the ECM to determine the amount of stepper motor movement required to achieve the specified idle speed.

The features of MEMS are:

- 1. One common ECM is utilised, incorporating a programmed ignition system and a fuel injection system.
- A separate diagnostic socket facilitates diagnosis of the system and engine tuning using 'TestBook' without disconnecting the ECM harness multiplug. The diagnostic socket receives and transmits appropriate signals to and from the ECM on a WY wire.
- 3. The ECM incorporates short circuit protection and has powerful diagnostic capabilities with the ability to store intermittent faults on certain inputs. These capabilities are fully utilised by the programmable TestBook.
- 4. The ignition system is used to improve the idle speed response, and by advancing or retarding the ignition when load is placed on, or removed from the engine.
- 5. If certain system inputs fail, the ECM implements a back-up facility enabling the system to carry on functioning, although at a reduced level of performance.

4.8 MINI 97MY

PROGRAMMED IGNITION SYSTEM

MEMS incorporates a programmed ignition system, the timing being controlled using digital techniques instead of the conventional mechanical and vacuum advance mechanisms.

The ECM determines the correct ignition timing by receiving signals from the following:

- Crankshaft position sensor (crankshaft position and engine speed)
- 2. Camshaft position sensor (camshaft position and cam period)
- 3. Manifold absolute pressure sensor (engine load)
- 4. Engine coolant temperature sensor (engine temperature)
- 5. Throttle position sensor

Timing is controlled by the ECM which is energised by the main relay, located within the relay module. Spark distribution is achieved by a direct ignition system which consists of an ignition coil driven directly by the ECM. The twin-ignition coil is mounted on the front of the engine and has a primary winding resistance of 0.63 to 0.77 ohms at 20°C, which allows full h.t. output to be attained sooner thus making coil operation more consistent throughout the engine speed range.

MEMS ECM

The ignition sense of the ECM receives battery voltage from fuse A4 in the passenger compartment fuse box on a W wire provided the starter switch is in position II. As a result the ECM supplies an earth from the main relay control on a WK wire to one side of the main relay coil (within the MEMS relay module). Since the other side of the main relay receives battery voltage on an N wire from link 4 in the engine compartment fuse box, the relay will energise switching battery voltage via the relay contacts on an NK wire to the injector(s), purge valve, stepper motor, ignition coil, manifold heater (Japan only) and positive feed to the ECM.

MINI 97MY 4.9

Crankshaft position (CKP) sensor

The speed and position of the engine are detected by the crankshaft position (CKP) sensor which projects through the engine adapter plate. A critical air gap exists between the CKP sensor and the flywheel, which is essential to allow correct engine operation.

The flywheel incorporates a reluctor ring which consists of 32 poles spaced at 10° intervals, with 4 missing poles at 30°, 60°, 210° and 250°. The missing poles inform the ECM when to operate the injectors, with the remaining poles providing a continual update of crankshaft position and engine speed. As the flywheel rotates, each pole that passes the CKP sensor disturbs the magnetic field created by the sensor inducing a voltage pulse in the coil. The CKP sensor is monitored by the ECM on UP and WU wires.

Camshaft position (CMP) sensor

The camshaft position sensor has two functions; the first is to enable the ECM to run a sequential fuelling mode; the second is to measure the actual cam period, this measurement is achieved using teeth on the camshaft to indicate when the valve opens and closes. The CMP sensor is monitored by the ECM on BU and RY wires.

Manifold absolute pressure (MAP) sensor

The manifold absolute pressure sensor is mounted directly on the inlet manifold and provides the ECM with an accurate representation of the load placed on the engine. This allows the ECM to adjust the quantity of fuel being injected together with the ignition timing, to achieve optimum fuelling of the engine. The MAP sensor achieves this by detecting pressure variations inside the manifold, then converting these variations into graduated electrical signals which are monitored by the ECM on RG and YP wires to determine engine load. Earth supply is on a KB wire.

4.10 MINI 97MY

Engine coolant temperature (ECT) sensor

The engine coolant temperature (ECT) sensor is located on the coolant outlet elbow. It is a temperature dependent resistor (thermistor), the voltage output of which varies in inverse proportion to temperature, in that the output increases as temperature decreases or the reverse. The change in resistance is monitored by the ECM on a KG wire and as a result the ECM can adjust the length of injector opening time required. The ECM supplies the coolant temperature sensor with an earth path on a KB wire.

Manifold heater (Japan only)

One side of the manifold heater relay coil receives battery voltage from link 4 in the engine compartment fuse box via the closed contacts of the main relay (providing it is energised). The other side of the relay coil receives a control earth on a BK wire from the link 4 in the engine compartment fuse box via the closed contacts of the relay to the manifold heater.

Throttle position sensor

The throttle position (TP) sensor is a potentiometer attached to the throttle housing and is directly coupled to the throttle disc. Closed throttle is detected by the TP sensor which initiates idle speed control via the idle air control valve (IACV).

The TP sensor receives a 5 volt supply from the ECM on a YP wire and is supplied with an earth on a KB wire. The sensor then provides a signal which is proportional to throttle disc position on a YG wire to the ECM.

Idle speed control

With the throttle pedal released and the engine at idle, the ECM maintains stable idling performance by using the fast response of the engine to changes in ignition timing. According to the loads placed on or removed from the engine, the ECM responds to changes in engine speed and, together with adjustments to the idle air control valve (IACV), advances or retards the ignition timing to achieve a constant idling speed. When load is removed from the engine, the IACV returns to its original position and the ignition timing reverts to the idle setting.



NOTE: Due to the sensitivity of this system the ignition timing will be constantly changing at idle speed.

MINI 97MY 4.11

FUEL INJECTION SYSTEM

MEMS injection system incorporates one (on SPI version) or two (on MPI version) injectors which are located between the pressurised fuel rail and the inlet manifold. The injectors are solenoid operated and direct a spray of fuel into the inlet manifold onto the back of the inlet valves.

The amount of fuel injected is determined by how long the injector is held open (known as the injector pulse width). To achieve the required air fuel ratio the ECM receives signals from the following inputs:

- Crankshaft position sensor (engine speed).
- 2. Camshaft position sensor (camshaft position and cam period).
- 3. Manifold absolute pressure sensor (engine load).
- 4. Intake air temperature sensor (inlet air temperature).
- 5. Engine coolant temperature sensor (engine temperature).
- 6. Throttle position sensor (rate of throttle opening or throttle closed position).
- 7. Battery voltage (state of battery charge).
- 8. Heated oxygen sensor (oxygen content of exhaust gases).

4.12 MINI 97MY

Idle air control valve (stepper motor)

The idle air control valve (IACV) is mounted on the inlet manifold. It receives battery voltage on an NK wire via the main contacts and is controlled by the ECM on OS (phase 1), KU (phase 2), OG (phase 3), and OU (phase 4) wires and receives an earth supply on a KB wire. During cold starting, the ECM provides a fast idle by sending a signal to the IACV which opens a pintle valve situated inside an air passage within the throttle housing. This allows air to bypass the throttle disc and flow directly into the inlet manifold. As the engine coolant temperature rises the fast idle is reduced until normal idle speed is attained.

Intake air temperature sensor

The intake air temperature (IAT) sensor is located on the side of the inlet manifold. The IAT sensor is of the negative temperature coefficient (NTC) type, reducing its resistance with increases in air temperature. The ECM monitors the IAT sensor on a GB wire and is supplied with an earth on a B wire. When the ECM receives a signal from the sensor, it uses the signal along with that from the MAP sensor to calculate the volume of oxygen in the air and carry out fine adjustments of the injected fuel to attain the optimum mixture strength.

Catalytic Converter System

Heated oxygen sensor

The heated oxygen sensor (HO2S) is part of a closed loop-type exhaust emission system. The sensor is fitted in the exhaust manifold and is designed to monitor the exhaust gases. In weak air/fuel mixtures, oxygen content in the exhaust gas increases, decreasing the voltage output to the ECM. As the air/fuel mixture becomes richer so oxygen content decreases, increasing the voltage output to the ECM.

One side of the oxygen sensor relay coil receives an earth from the ECM on a BG wire providing the starter switch is in position II. The other side of the relay coil receives battery voltage from link 4 in the engine compartment fuse box on an N wire via the contacts of the main relay (providing it is energised). As a result the oxygen sensor relay energises and battery voltage is switched from link 4 in the engine compartment fuse box on an N wire via the closed contacts of the oxygen sensor relay to the oxygen sensor on a UR wire.

DESCRIPTION AND OPERATION

Since an earth is provided on a B wire, the integral heating element will quickly reach an efficient operating temperature from cold.

The resultant output voltage on the LGS and S wires is used by the ECM to determine what correction to fuel delivery is necessary.



CAUTION: An oxygen sensor will not operate if its power supply is removed, if it has been dropped, subjected to any impact or if cleaning materials are used on it.

Purge valve

The purge valve receives battery voltage on an NK wire from link 4 in the engine compartment fuse box on an N wire from the closed contacts of the main relay (providing it is energised) and a control signal from the ECM on a BW wire. The valve remains closed when the engine is cold and at idling speed to protect engine tune and catalyst performance. When the purge valve is open, fuel vapour from the charcoal canister is drawn into the throttle housing for combustion.

Automatic gearbox

Inhibitor switch

The switch fitted to the gearbox inhibits operation of the starter motor unless the selector lever is in position **P** or **N**.

With the selector lever in position **P** or **N** the inhibitor switch will provide an earth path for the starter relay on a BLG wire which will allow the engine to be started.

If the selector lever is in any other position than **P** or **N**, the inhibitor switch will not provide an earth path, so preventing the vehicle starting.

The inhibitor switch also provides the ECM with an input so that idle speed is automatically adjusted when a drive position is selected.

4.14 MINI 97MY

FUEL PUMP OPERATION

One side of the fuel pump relay coil receives battery voltage from fuse A4 in the passenger compartment fuse box on a W wire provided the starter switch is in position II. The other side of the relay coil receives an earth on a BP wire from the MEMS control unit provided the correct operating conditions exist, (see Engine Management System) causing the relay to energise.

The energised relay switches battery voltage from link 4 in the engine compartment fuse box on an N wire, via fuse C7 in the passenger compartment fuse box to the inertia fuel shutoff switch on an NS wire. Provided the inertia fuel shutoff switch remains closed, battery voltage is fed on a WP wire to the fuel pump. Since the pump has a permanent earth on a B wire it will commence operation.

BRAKE FLUID LEVEL WARNING OPERATION

The system provides a visual warning if the fluid in the brake fluid reservoir falls below the accepted level. The brake system warning lamp consists of a 1.2 W bulb which receives battery voltage on a PO wire from fuse C4 in the passenger compartment fuse box. Under normal operating conditions the lamp will not function, but if the brake fluid level falls the displacement will close the contacts of the fluid level switch, switching an earth on a BW wire to the other side of the lamp causing it to illuminate.

Brake test switch

When verification of the warning lamp circuit is needed, operation of the brake test switch supplies an earth via the switch on a BW wire to the warning lamp, causing it to illuminate.

4.16 MINI 97MY

SRS (AIRBAG) OPERATION



NOTE: The airbag control unit (DCU) is a non-serviceable component and no attempt to repair or modify the module should be made.

The airbag control unit receives battery voltage from the starter switch via fuse B5 in the passenger compartment fuse box on a G wire. Earth to the airbag control unit is on a B wire.

In the event of an accident involving a frontal impact, a sensor situated inside the airbag control unit monitors the force of the impact to determine whether the airbag should be inflated. A safing sensor wired in series with the main sensor allows the system to discriminate between driving on roads with potholes, striking kerbs, etc., and an actual impact.

The sensors when activated supply voltage to the igniter circuit of the airbag. Grains of Nitrocellulose and Nitroglycerine inside the airbag module, ignite and combine in a chemical reaction to form a large amount of Nitrogen gas leading to inflation of the airbag in approximately 30 milli-seconds.

As the occupant moves forward into the airbag it immediately discharges the gas through a vent hole to provide progressive deceleration and reduce the risk of injuries.

A regulator circuit and a back-up power circuit are connected in parallel with the car battery. The regulator circuit increases the stability of the SRS system by raising the voltage when the battery voltage drops. The back-up power circuit provides power in the event of the battery being disconnected due to the impact.

Sequence of operation:

- 1. The main sensor and the safing sensor are activated.
- 2. Power is supplied to the airbag igniter by the battery or the back-up circuit.
- 3. The airbag deploys.

It takes about 0.1 second from the beginning of the airbag deployment until it is completely deflated.

Driver's airbag

The driver's airbag is connected to the airbag control unit via the rotary coupler on Y and R wires.

Pre-tensioners

The right hand pretensioner is controlled by the DCU on N and NR wires.

The left hand pretensioner is controlled by the DCU on O and OU wires.

SRS warning lamp

When the starter switch is operated to position II, the warning lamp (located on the instrument panel) receives battery voltage from fuse A4 on a W wire and a control signal from the airbag control unit on a P wire. The warning lamp will illuminate when the electrical circuits are initialised while the system performs a self-diagnosis test. If the system finds no fault during self diagnosis the warning lamp will extinguish after approximately 6 seconds.

In the event of a fault in the system the warning lamp will illuminate continuously or fail to illuminate during the self diagnosis test.

4.18 MINI 97MY

SEAT BELT WARNING OPERATION (JAPAN ONLY)

The rear seat belt warning lamp (located on the instrument panel) receives battery voltage from fuse A6 in the passenger compartment fuse box on a G wire, provided the starter switch is in position II. Whenever the seat belt is unlatched, the warning lamp illuminates as a result of receiving an earth on a B wire via the seat belt buckle switch on a BG wire. The seat belt buckle earth path is broken when the buckle is latched, causing the lamp to extinguish.

CATALYST OVERHEAT WARNING OPERATION (JAPAN ONLY)

When the starter switch is in position II, battery voltage is switched through fuse A6 in the passenger compartment fuse box on a W wire to the catalyst overheat ECU on a G wire. Earth to the ECU is on a B wire.

If the catalyst overheat ECU detects an overheat condition, the overheat switch will operate switching battery voltage on a G wire from fuse A6 to the catalyst overheat buzzer on a BY wire. Since the buzzer has an earth connection on a GY wire from the catalyst overheat ECU, the buzzer will sound and continue to do so while the catalyst overheat condition exists.

System check

When the starter switch is initially operated, the catalyst overheat buzzer will sound for a few seconds.

4.20 MINI 97MY

AIR CONDITIONING OPERATION (JAPAN)

The air conditioning system may only be operated with the starter switch in position II. The position of the temperature control determines the threshold at which the system operates and the blower switch permits selection of four different blower motor speeds.

MEMS ECM

The thermistor monitors the temperature at the evaporator and provides feedback on S and SR wires to the A/C thermostat. Dependent on the level of cooling required the temperature control can be adjusted, providing input on YR and YB wires to the A/C thermostat. The A/C thermostat supplies an aircon request signal to the ECM on a GW wire via the dual pressure switch. The ECM responds by providing an earth on a RW wire to one side of the compressor clutch relay coil and one side of the condenser fan relay coil.

Air conditioning switch and condenser fan

When the air conditioning switch is operated, battery voltage is switched from fuse A6 in the passenger compartment fuse box on a G wire via the air conditioning switch on a GW wire to one side of the condenser fan relay coil, compressor clutch relay coil and the aircon blower relay coil (located within the relay module). As a result the compressor clutch relay energizes, switching battery voltage from fuse A6 via the relay contacts to the compressor clutch. Since the compressor clutch mounting is connected to earth, the clutch will operate to engage the compressor. The condenser fan relay is simultaneously energized when the compressor clutch relay is energized, switching battery voltage from fuse A9 on a U wire via the condenser fan relay contacts to the condenser fan on a U wire. Since the other side of the condenser fan is connected to earth, the fan will operate.

Aircon blower motor, switch and resistor pack

One terminal of the aircon blower motor receives battery voltage from link 2 in the engine compartment fuse box via the starter switch, the auxiliary relay (provided it is energized) and fuse A7. When the blower switch is operated from the OFF position, an earth is switched on a UG wire to the other side of the aircon blower relay coil and simultaneously to the other terminal of the aircon blower motor via the resistor pack or direct dependent on the blower speed required. In addition, since battery voltage already exists on the aircon blower relay coil, the relay energizes, switching an earth via the relay contacts to the A/C thermostat.

Moving the blower switch from the OFF position increases the speed of the aircon blower motor incrementally as follows:

- The first position provides a connection from earth via the blower switch and blower speed switch on a UG wire and via all three resistors in the pack to the aircon blower motor terminal on a UB wire.
- The second position provides a connection from earth via the blower switch and blower speed switch on a UY wire and via two resistors to the aircon blower motor terminal on a UB wire.
- The third position provides a connection from earth via the blower switch and blower speed switch on a UR wire and via one resistor to the aircon blower motor terminal on a UB wire.
- The fourth position provides an earth path on a UB wire direct to the aircon blower motor terminal.

Dual pressure switch

The dual pressure switch consists of a high and a low pressure switch connected in series with the aircon request signal from the A/C thermostat to the MEMS ECM. In the event of pressure deviating from the normal condition, the relevant switch will open preventing the signal reaching the ECM and thereby inhibiting the system. When the correct pressure is restored the system will resume normal operation.

4.22 MINI 97MY

HEATER BLOWER OPERATION

The heater blower assembly incorporates a 3-position switch which controls the operation of the blower motor. The blower switch allows low speed operation when position I is selected, and high speed operation when position II is selected.

The heater blower assembly receives battery voltage from link 2 in the engine compartment fuse box via the starter switch, auxiliary relay (provided the relay is energized) and fuse A8 in the passenger compartment fuse box on an LGO wire. When blower switch position I is selected, an earth is switched on a B wire via the integral blower motor resistor and the blower switch to the blower motor. Since there is a voltage drop across the resistor, the motor will operate at slow speed. When blower switch position II is selected, an earth on a B wire is switched directly to the blower motor causing the motor to rotate at full speed.

COOLING FAN OPERATION

MPI

The cooling fan is controlled by the MEMS control unit which supplies an earth to the cooling fan relay provided operating conditions are met, see Engine Management System.

Battery voltage is supplied on an N wire from fusible link 1 in the engine compartment fuse box via fuse B9 in the passenger compartment fuse box to one side of the cooling fan relay coil on a P wire. The coolant temperature sensor provides a feedback to the MEMS control unit on a KG wire.

When the coolant temperature reaches 105°C, the MEMS control unit provides an earth to the other side of the cooling fan relay coil on an LGB wire, which causes the relay to energize. Battery voltage on the P wire is then switched from fuse B9 in the passenger compartment fuse box via the closed contacts of the cooling fan relay to the cooling fan on the BG wire. Since the other side of the cooling fan relay is connected to earth on a B wire, the fan will operate. When the temperature falls to 98°C the MEMS control unit removes the earth to the cooling fan relay coil on the LGB wire, causing the cooling fan relay to deenergize which removes the supply to the cooling fan relay.

SPI (Japan only)

The cooling fan is an auxiliary unit which acts as a back-up for the engine driven cooling fan when the coolant temperature becomes excessive. It is controlled by the high temperature switch attached to the radiator and operates once operating conditions have been met.

One side of the cooling fan relay receives battery voltage on LGW wires from fuse B4 in the passenger compartment fuse box provided the auxiliary relay is energized. When the coolant temperature exceeds 98°C, the contacts of the high temperature switch close providing an earth to the other side of the cooling fan relay coil on an LGB wire. Battery voltage on the P wire is then switched from fuse B9 in the passenger compartment fuse box via the closed contacts of the cooling fan relay to the cooling fan on the BG wire. Since the other side of the cooling fan relay is connected to earth on a B wire, the fan will operate. When the temperature falls to 93°C the high temperature switch opens, causing the cooling fan relay to de-energize which removes the supply to the cooling fan relay.

4.24 MINI 97MY

HEATED REAR WINDOW OPERATION

The heated rear window switch will only allow the heated rear window element to function when the starter switch is at position II. Fuse C9 in the passenger compartment fuse box supplies battery voltage to the heated rear window switch on a G wire. When the switch is operated, battery voltage is switched to the heated rear window element and switch illumination bulb on a GY wire. Since the other side of the element and the illumination bulb have permanent connections to earth on B wires, the bulb will illuminate and the element will commence heating.

WINDSCREEN WIPERS AND WASHERS OPERATION

The wiper system is a two speed system, incorporating single wipe, intermittent wipe and a screen wash/wipe facility. The normal speed is controlled directly via the column switches. The intermittent wipe, fast speed and wash/wipe are controlled by the front wiper control unit. The windscreen wipers will only operate when the starter switch at position I or II.

Provided the starter switch is in position I or II, one side of the auxiliary relay coil receives battery voltage on an LG wire from the starter switch. Since the other side of the relay coil is connected to earth, the relay will energise, switching battery voltage from fusible link 2 in the engine compartment fuse box via the relay contacts on an LGW wire to fuse B8 in the passenger compartment fuse box. Fuse B8 connects the battery voltage to the wash/ wipe switch, windscreen wiper motor and wiper control unit on an LGO wire.

Intermittent wipe

When the intermittent option is selected, battery voltage on an LGO wire to the wiper switch is switched via the switch on an LGG to the wiper control unit. The wiper control unit provides an output on the NLG wire via the wash/wipe switch on a ULG wire to the motor slow speed terminal after a fixed delay of approximately 5 seconds. Since the other motor terminal is permanently connected to earth on a B wire, the motor will rotate causing the wiper blades to operate.

Wiper normal speed

With the wiper switch in position I, battery voltage on an LGO wire from fuse B8 in the passenger compartment fuse box is switched via the wash/wipe low switch on a ULG wire to the motor slow speed terminal. Since the other motor terminal is permanently connected to earth on a B wire, the motor will rotate causing the wiper blades to operate.

Wiper fast speed

With the wiper switch in position II, battery voltage on an LGO wire from fuse B8 in the passenger compartment fuse box is switched via the wash/wipe high switch on a RLG wire to the motor fast speed terminal. Since the other motor terminal is permanently connected to earth on a B wire, the motor will rotate causing the wiper blades to operate.

4.26 MINI 97MY

Single wipe

When the right-hand steering column lever is pressed down momentarily, battery voltage is switched on an LGO wire from fuse B8 in the passenger compartment fuse box via the front wash/wipe switch on an RLG wire to the motor fast speed terminal. Since the other motor terminal is permanently connected to earth on a B wire, the motor will rotate causing the wiper blades to operate.

The wipers perform a single operation and if the lever is held in the down position, the wipers will continue to operate.

Wash/wipe

When the wash switch is operated, battery voltage on an LGO wire is switched from fuse B8 in the passenger compartment fuse box on an OR wire to one terminal of the washer pump. Since the other washer pump terminal is permanently connected to earth on a B wire, the pump will dispense water to the screen. Simultaneously the front wiper control unit receives battery voltage on an OR wire. The front wiper control unit responds by supplying battery voltage on an NLG wire via the wash/wipe low switch to the wiper motor slow speed terminal on a ULG wire. Since the other motor terminal is permanently connected to earth on a B wire, the motor will rotate causing the wiper blades to operate.

Wiper motor park

The integral wiper motor park switch is designed to switch battery voltage from fuse B8 in the passenger compartment fuse box on an LGO wire to the front wiper control unit on an NLG wire. This ensures that, when the wash/wipe switch is turned to the OFF position, the wiper control unit responds by supplying battery voltage on an NLG wire via the wash/wipe low switch to the wiper motor slow speed terminal on a ULG wire. This returns the park switch to the rest position.

Brake lamps operation

When the brake pedal is operated, battery voltage on a G wire from fuse C6 in the passenger compartment fuse box is switched on GP wires to the brake lamps. Since the other side of the lamps are permanently connected to earth on B wires the lamps will illuminate.

Reverse lamps operation

When reverse gear is selected battery voltage on a G wire from fuse C6 in the passenger compartment fuse box is switched on GN wires to the reverse lamps. Since the other side of the lamps are permanently connected to earth on B wires the lamps will illuminate.

4.28 MINI 97MY

Head, side, tail and number plate lamps operation

Headlamps

Dipped beam

The lighting switch common receives battery voltage on an N wire from fusible link 3 in the engine compartment fuse box.

Provided the dip/main switch is in the 'DIP' position, operation of the lighting switch to position II, switches battery voltage on a UR wire to fuses A2 and C2 in the passenger compartment fuse box. Battery voltage is switched from fuse A2 to the RH dip lamp on a UR wire and from fuse C2 to the LH dip lamp on a UR wire. Since the other side of the lamps are permanently connected to earth on B wires the lamps will illuminate.

Main beam

The lighting switch common receives battery voltage on an N wire from fusible link 3 in the engine compartment fuse box.

Provided the dip/main switch is in the 'MAIN' position, operation of the lighting switch to position II, switches battery voltage on a UW wire to fuses A1 and C1 in the passenger compartment fuse box. Battery voltage is switched from fuse A1 to the RH main lamp on a UW wire and from fuse C1 to the LH main lamp on a UW wire. Since the other side of the lamps are permanently connected to earth on B wires the lamps will illuminate.

Headlamp flash

The lighting switch common receives battery voltage on an N wire from fusible link 3 in the engine compartment fuse box.

Regardless of the position of the dip/main switch or the lighting switch, operation of the headlamp flash switch switches battery voltage on a UW wire to fuses A1 and C1 in the passenger compartment fuse box. Battery voltage is switched from fuse A1 to the RH main lamp on a UW wire and from fuse C1 to the LH main lamp on a UW wire. Since the other side of the lamps are permanently connected to earth on B wires the lamps will illuminate for as long as the headlamp flasher switch remains closed.

Side and tail lamps

The lighting switch common receives battery voltage on an N wire from fusible link 3 in the engine compartment fuse box.

Operation of the lighting switch to position I, switches battery voltage on an R wire to fuses A3 and C3 in the passenger compartment fuse box. Battery voltage is switched from fuse A3 to the RH side and tail lamps on RW wires and from fuse C3 to the LH side and tail lamps on RB wires. Since the other side of the lamps are permanently connected to earth on B wires the lamps will illuminate.

Number plate lamps

The lighting switch common receives battery voltage on an N wire from fusible link 3 in the engine compartment fuse box.

Operation of the lighting switch to position I, switches battery voltage on an R wire to fuse C3 in the passenger compartment fuse box. Battery voltage is switched from fuse C3 to the LH side and tail lamps on RB wires, and to the number plate lamps on RB-R wires. Since the other side of the lamps are permanently connected to earth on B wires the lamps will illuminate.

4.30 MINI 97MY

Front fog and driving lamps operation

Front fog lamps

Provided the lighting switch is in position II, battery voltage is switched from fusible link 3 in the engine compartment fuse box on an N wire via the lighting switch on an R wire to fuse C3 in the passenger compartment fuse box.

Operation of the front fog lamp switch supplies battery voltage on an RB wire from fuse C3 in the passenger compartment fuse box via the front fog lamp switch on a UG wire to one side of the front fog lamp relay coil. Since the other side of the relay coil is connected to earth, the relay energises and switches battery voltage from the stand-alone fuseholder on a PU wire and via the front fog lamp relay contacts on UG wires to both fog lamps. Since the other side of the lamps are permanently connected to earth on B wires the lamps will illuminate.

Driving lamps

Provided the lighting switch is in position II, battery voltage is switched from fusible link 3 in the engine compartment fuse box on an N wire to the lighting switch. When the 'MAIN' position is selected on the dip/main switch, battery voltage on a UW wire is switched via fuse A1 in the passenger compartment fuse box to one side of the driving lamp relay coil on a UW wire. Since the other side of the relay coil is connected to earth, the relay energises and switches battery voltage on a P wire from fuse B1 in the passenger compartment fuse box via the relay contacts to the driving lamps on UY wires. Since the other side of the lamps are permanently connected to earth on B wires the lamps will illuminate.

Front fog and driving lamps operation (Japan)

Front fog lamps

Provided the lighting switch is in position II, battery voltage is switched from fusible link 3 in the engine compartment fuse box on an N wire via the lighting switch on an R wire to fuse C3 in the passenger compartment fuse box.

Operation of the front fog lamp switch supplies battery voltage on an RB wire from fuse C3 in the passenger compartment fuse box via the front fog lamp switch on a UG wire to one side of the front fog lamp relay coil. Since the other side of the relay coil is connected to earth, the relay energises and switches battery voltage from the stand-alone fuseholder on a PU wire via the closed contacts of the front fog lamp relay on UG wires to both fog lamps. Since the other side of the lamps are permanently connected to earth on B wires the lamps will illuminate.



NOTE: With the lighting switch at position II, operation of the front fog lamp switch will remove battery voltage from the driving lamp relay coil, de-energising the relay which removes battery voltage from the driving lamps.

Driving lamps

Provided the lighting switch is in position II, battery voltage is switched from fusible link 3 in the engine compartment fuse box on an N wire to the lighting switch. When the 'MAIN' position is selected on the dip/main switch, battery voltage on a UW wire via fuse A1 in the passenger compartment fuse box is switched to the front fog lamp switch on a UW-UB wire. Provided the fog lamp switch is in the 'OFF' position, battery voltage is switched on a UW wire to one side of the driving lamp relay coil. Since the other side of the relay coil is connected to earth, the relay energises and switches battery voltage on a P wire from fuse B1 in the passenger compartment fuse box via the relay contacts to the driving lamps on UY wires. Since the other side of the lamps are permanently connected to earth on B wires the lamps will illuminate.



NOTE: Operation of the front fog lamp switch will remove battery voltage from the driving lamp relay coil, de-energising the relay which removes battery voltage from the driving lamps.

4.32 MINI 97MY

Rear fog lamps operation

The rear fog lamps will only function when the lighting switch is in position II. When the rear fog lamp switch is operated, battery voltage is switched on a UO wire from fuse B2 in the passenger compartment fusebox to the fog lamps on UY wires. Since the other side of the lamps are permanently connected to earth on B wires the lamps will illuminate.

Headlamp levelling operation

To prevent dazzle to oncoming vehicles the headlamps can be adjusted by a switch located on the fascia. When an increased load is placed on the rear of the vehicle raising the front, it is possible to move the headlamps to one of four positions. Battery voltage is supplied from the lighting switch via fuse B3 in the passenger compartment fuse box on an R wire to the headlamp levelling switch and both headlamp levelling motors. Earth paths are on B wires. The headlamp levelling units, fitted to the back of each headlamp, adjust position in response to voltage changes sensed at the levelling switch.

Headlamp levelling switch

When the headlamp levelling switch is operated it switches in different value resistors dependent on the position selected. This provides the headlamp levelling motor with one of four different voltages on UG wires. The levelling motor uses internal electronics to compare the voltage from the switch with the battery voltage from fuse B3 on an R wire. Dependent on the difference between the two figures, since both headlamp levelling motors have one terminal permanently connected to earth on B wires, the headlamp moves to a set position.

Switch Position	Vehicle load
0	Driver alone or both front seats occupied (luggage compartment empty)
1	All seats occupied (no luggage)
2	All seats occupied PLUS luggage
3	Driver alone PLUS full luggage compartment

4.34 MINI 97MY

INDICATORS AND HAZARD SYSTEM OPERATION

Indicators

The indicators will only operate when the starter switch is in position II, the hazard system will operate irrespective of the starter switch position.

With the starter switch in position II, battery voltage on a G wire from fuse C6 in the passenger compartment fuse box is supplied to one side of the direction indicator relay coil on a G wire. Since the other side of the relay coil is connected to earth, the relay will energise providing a path to the common of the direction indicator switch on an LGN wire from the direction indicator/hazard warning unit on an LGK wire.

Right

When the direction indicator switch is moved to indicate a right turn, a pulsed voltage from the direction indicator/hazard warning unit on an LGK wire is switched via the direction indicator relay contacts on an LGN wire to the direction indicator switch re-directs the pulsed voltage on a GW wire to the RH front and rear indicator lamps, side repeater lamps and the direction indicator warning lamp in the instrument pack. Since the other side of the lamps are permanently connected to earth on B wires they will flash simultaneously.

Left

When the direction indicator switch is moved to indicate a left turn, a pulsed voltage from the direction indicator/hazard warning unit on an LGK wire is switched via the direction indicator relay contacts on an LGN wire to the direction indicator switch common. The direction indicator switch re-directs the pulsed voltage on a GR wire to the LH front and rear indicator lamps, side repeater lamps and the direction indicator warning lamp in the instrument pack.. Since the other side of the lamps are permanently connected to earth on B wires they will flash simultaneously.

Hazard warning

When the hazard warning switch is operated, pulsed voltage is switched on an LGK wire from the direction indicator/hazard warning unit on LGK wires to the hazard warning switch. The switch contacts simultaneously connect the pulsed voltage on GR and GW wires to the front and rear indicator lamps, side marker lamps and both instrument pack warning lamps. In addition, the pulsed voltage is switched on an LGG wire to the integral hazard warning lamp. Since the other side of the lamps are permanently connected to earth on B wires the action of the direction indicator/hazard warning unit causes all the connected lamps to flash in unison.

4.36 MINI 97MY

INTERIOR LAMP CIRCUIT OPERATION

Interior illumination consists of a lamp located in the headlining above the LH `B' post which operates when either door is opened.

The interior lamp unit receives a supply from fuse C4 in the passenger compartment fuse box on a PO wire.

Under normal circumstances when either the driver's or passenger's door is opened, the door switch contacts will open providing an earth path to the interior lamp unit on the PW wire which will cause the lamp to illuminate.

When the interior light switch is operated, the lamp will illuminate as a result of the earth connection on the B wire.

INTERIOR ILLUMINATION

When the lighting switch is operated battery voltage is switched from link 3 on an N wire via the lighting switch on an R wire to fuse A3 in the passenger compartment fuse box. Fuse A3 supplies battery voltage on RW wires to the clock and instrument pack. Where applicable fuse A3 also supplies battery voltage on RW wires to the oil temperature gauge, voltage gauge and air conditioning switch pack. Since the other side of the lamps are permanently connected to earth on B wires the lamps will illuminate.

To ensure an even spread of light for panel illumination, three 2.2 W bulbs are fitted in the instrument pack while the clock, oil temperature gauge and voltage gauge are fitted with 2.2 W bulbs. A single 1.2 W bulb is fitted inside the air conditioning switch pack (Japan only).

On vehicles fitted with an automatic gearbox, provided the starter switch is at position I battery voltage is switched from link 2 on an N wire via the starter switch on an LG wire to one side of the auxiliary relay coil. Since the other side of the relay is permanently connected to earth, the auxiliary relay will energise switching battery voltage from link 2 on an N wire via the relay contacts on an LGW wire to fuse B4 in the passenger compartment fuse box.

Fuse B4 supplies a single 2.2 W bulb inside the automatic gearbox selector indicator lamp on an LGW wire. Since the other side of the lamp is permanently connected to earth on a B wire the lamp will illuminate.

4.38 MINI 97MY

INSTRUMENT PACK OPERATION

The main power source for the instrument pack is from fuse link 2 in the engine compartment fuse box via the starter switch and fuse A4 in the passenger compartment fuse box on a W wire. The earth path is on a B wire.

Coolant temperature gauge

The temperature gauge receives stabilised voltage from the stabiliser unit and a signal on a GU (Spi) or KG-GU (Mpi) wire from the MEMS control unit which reflects the temperature detected by the coolant temperature sensor.

Fuel Gauge

The fuel gauge receives stabilised voltage from the stabiliser unit. The gauge pointer deflects dependent on the resistance between the GB connection at the sender unit and earth representing the quantity of fuel in the tank. The earth path to the sender unit is on a B wire.

When the sender unit float is at its lowest point, indicating an empty fuel tank, the resistance to earth is at its greatest value. The resistance value to fuel gauge position is:

Sender resistance	Fuel gauge position
270 ohms	Empty
67 ohms	Half full
15.5 ohms	Full

Clock

The analogue clock has a permanent earth on a B wire and while the starter switch is in position O, battery voltage is supplied from fuse C4 on a PO wire.

Ignition/no charge warning lamp

The ignition/no charge warning lamp receives an ignition supply from fuse A4 on a W wire and is connected to the alternator on an NY wire. The lamp will illuminate if the voltage it receives on an NY wire is less than battery voltage i.e. the alternator is not supplying sufficient voltage to charge the battery.

Oil pressure warning lamp

Battery voltage is supplied from fuse A4 to the oil pressure warning lamp on a W wire. When oil pressure drops below a set level, the contacts in the oil pressure switch are closed. This provides a path to earth for the warning lamp on a WN wire causing it to illuminate.

Indicator warning lamps

These warning lamps give a visual indication when the direction indicators or hazards lamps are operated. The indicator circuit provides a pulsed voltage to the LH warning lamp on a GR wire or the RH warning lamp on a GW wire from the direction indicator switch.

Main beam warning lamp

Gives an indication that the headlamps are being operated on main beam by switching battery voltage to the lamp on a UW wire via fuse A1 in the passenger compartment fuse box. Since the other side of the lamp is permanently connected to earth on a B wire the lamp will illuminate

Airbag warning lamp

The airbag warning lamp receives battery voltage from fuse A4 on a W wire and a control signal from the airbag control unit on a P wire. The warning lamp will illuminate for approximately six seconds when the starter switch is turned to position II before extinguishing. There is a system fault when any of the following symptoms are observed:

- The warning lamp fails to illuminate when the starter switch is turned to position II.
- The warning lamp fails to extinguish after approximately six seconds.
- The warning lamp flashes or illuminates continuously while the car is being driven.

4.40 MINI 97MY

Tachometer

The tachometer receives battery current from fuse A4 in the passenger compartment fusebox on a W wire. The gauge pointer will deflect dependent on the signal received from the ignition coil on a WB wire.

Voltage gauge

The voltage gauge receives battery voltage from fuse A4 in the passenger compartment fuse box on a W wire providing the starter switch is in position II. The other side of the gauge is connected to earth on a B wire. The gauge pointer will deflect to indicate the condition of the battery.

Oil temperature gauge

The oil temperature gauge receives battery voltage from fuse A4 in the passenger compartment fuse box on a W wire providing the starter switch is in position II. The gauge pointer will deflect dependent on the resistance between the NU connection at the oil temperature sensor and earth representing the temperature of the oil. The earth path to the sensor is on a B wire.

IN-CAR ENTERTAINMENT OPERATION

Provided the starter switch is at position I battery voltage is switched from link 2 on an N wire via the starter switch on an LG wire to one side of the auxiliary relay coil. Since the other side of the relay is permanently connected to earth, the auxiliary relay will energise switching battery voltage from link 2 on an N wire via the relay contacts on an LGW wire to fuse B4 in the passenger compartment fuse box.

Fuse B4 supplies battery voltage to the radio cassette player on an LGW wire.

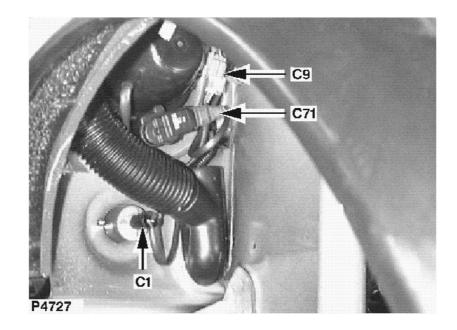
Battery voltage is also supplied from fusible link 1 in the engine compartment fuse box on the N wire to fuse C4 in the passenger compartment fuse box. The PO wire from fuse C4 is a permanent feed to the radio which enables it to retain its preset station memory when the starter switch is in the 'OFF' position. The B wire provides an earth for the radio.

The radio and cassette player audio outputs are fed directly to the speakers; the LH rear speaker on UB and UK wires, and the RH speaker on SK and SB wires.

4.42 MINI 97MY

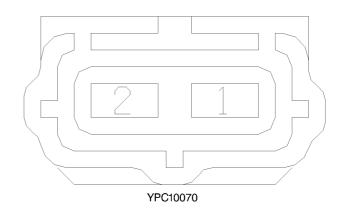


LH front direction indicator lamp Female BLACK Behind LH headlamp



(NL)

Linker voorste richtingaanwijzer - gloeilamp Vrouwelijk ZWART Achter linker koplamp



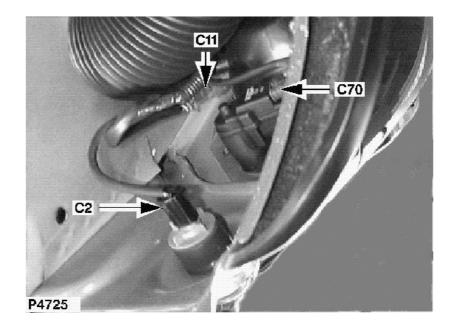
(E)

Luz intermitente de dirección delantera izquierda Hembra NEGRO Detrás del faro izquierdo

Cav	Col	Cct
1	GR	ALL
2	В	ALL

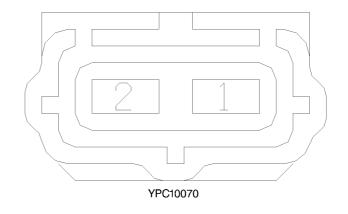


RH front direction indicator lamp Female BLACK Behind RH headlamp





Rechter voorste richtingaanwijzer - gloeilamp Vrouwelijk ZWART Achter rechter koplamp



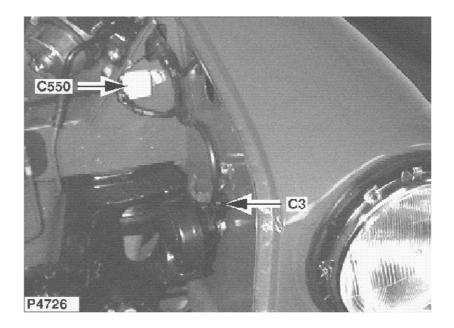


Luz intermitente de dirección delantera derecha Hembra NEGRO Detrás del faro derecho

Cav	Col	Cct
1	GW	ALL
2	В	ALL

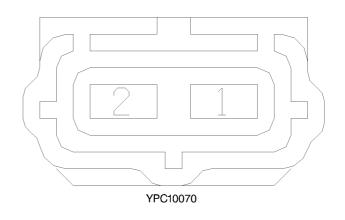


Horn(s)
Female
BLACK
LH side of engine
compartment



(NL)

Claxon(s) Vrouwelijk ZWART Linkerkant motorcompartiment



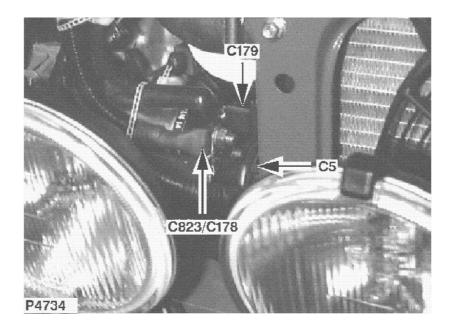
(E)

Bocina/s
Hembra
NEGRO
Lado izquierdo del compartimento motor

Cav	Col	Cct
1	PB	ALL
2	В	ALL

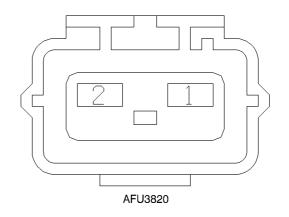


Cooling fan Female BLACK Lower front of engine - RH side





Koelventilator Vrouwelijk ZWART Onder/voorkant motor -Rechts



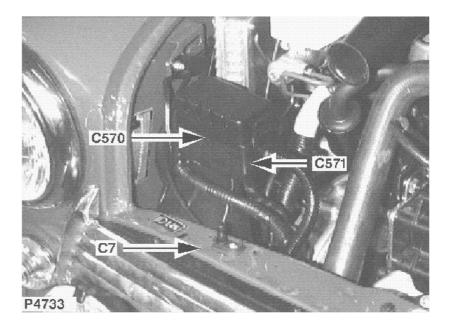


Ventilador de refrigeración Hembra NEGRO Parte delantera inferior del motor - Lado derecho

Cav	Col	Cct
1	BG	ALL
2	В	ALL

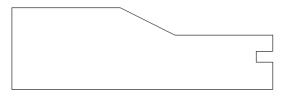


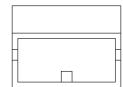
Bonnet switch Female BLACK Top of engine - RH side



(NL)

Motorkap - schakelaar Vrouwelijk ZWART bovenkant motor - Rechts





AAU1010

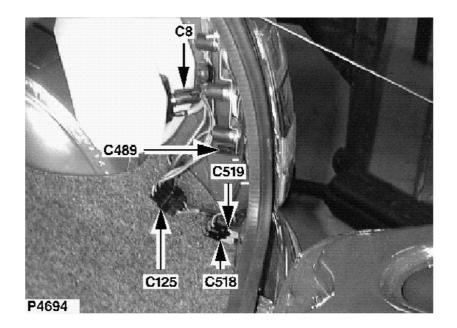


Interruptor del capó delantero Hembra NEGRO parte superior del motor -Lado derecho

Cav	Col	Cct
1	PR	ALL

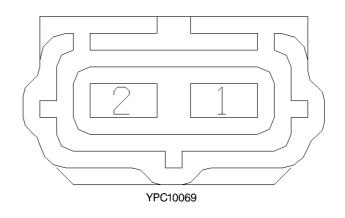


Windscreen washer pump Female BLACK Luggage compartment - RH side



(NL)

Ruitesproeierpomp Vrouwelijk ZWART bagageruimte - Rechts



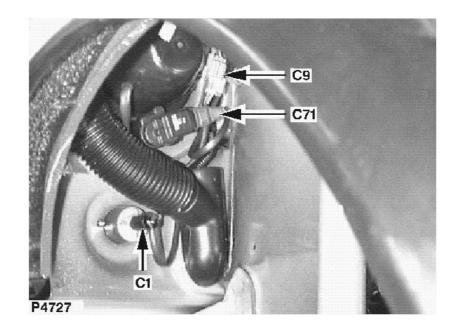
E

Bomba de lavaparabrisas Hembra NEGRO maletero - Lado derecho

Cav	Col	Cct
1	В	ALL
2	OR	ALL

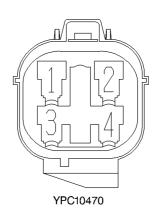


LH headlamp Female GREY Behind LH headlamp



(NL)

Linker koplamp Vrouwelijk LEIGRIJS Achter linker koplamp



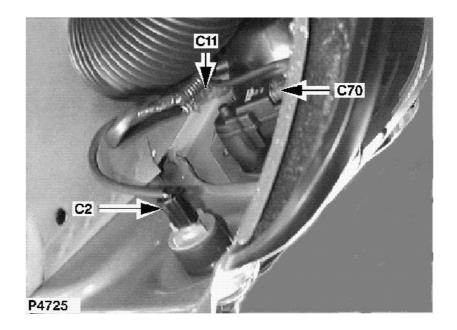
E

Faro izquierdo Hembra PIZARRO (GRIS) Detrás del faro izquierdo

Cav	Col	Cct
1	В	ALL
2	RB	ALL
3	UR	ALL
4	UW	ALL

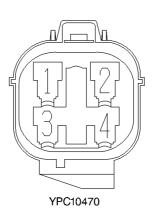


RH headlamp Female GREY Behind RH headlamp





Rechter koplamp Vrouwelijk LEIGRIJS Achter rechter koplamp



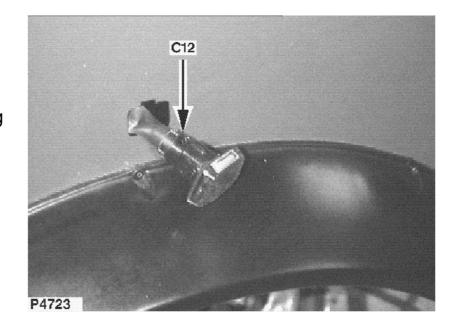


Faro derecho Hembra PIZARRO (GRIS) Detrás del faro derecho

Cav	Col	Cct
1	В	ALL
2	RW	ALL
3	UR	ALL
4	UW	ALL

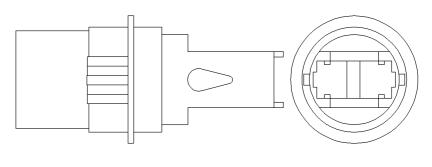


RH side repeater lamp Female BLACK On the side of the front wing



(NL)

Rechter zij-repeteerlamp gloeilamp Vrouwelijk ZWART Op zijkant van voorspatbord



AFU3698

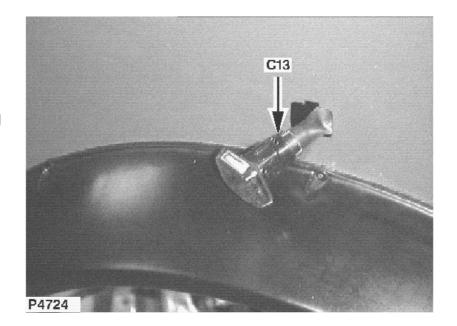


Luz repetidora derecha Hembra NEGRO En el costado de la aleta delantera

Cav	Col	Cct
1	GW	ALL
2	В	ALL

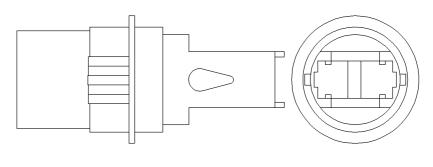


LH side repeater lamp Female BLACK On the side of the front wing





Linker zij-repeteerlamp gloeilamp Vrouwelijk ZWART Op zijkant van voorspatbord



AFU3698

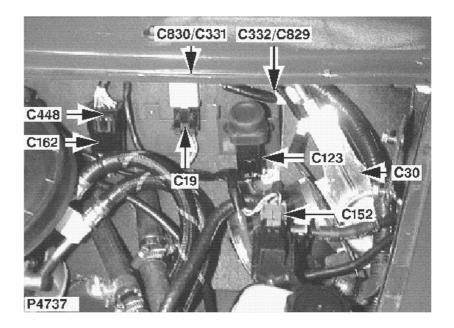


Luz repetidora izquierda Hembra NEGRO En el costado de la aleta delantera

Cav	Col	Cct
1	GR	ALL
2	В	ALL

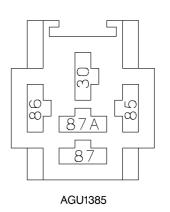


Cooling fan relay Female BLACK LH side of bulkhead



(NL)

Koelventilator - relais Vrouwelijk ZWART Linkerkant tussenschot



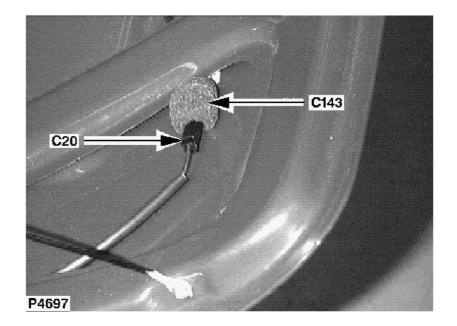
(E)

Relé del ventilador de refrigeración Hembra NEGRO Lado izquierdo del salpicadero

Cav	Col	Cct
30	Ρ	ALL
85	LGB	ALL
86	Р	ALL
87	BG	ALL

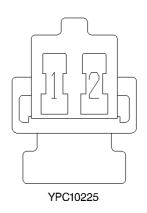


Body Harness to Number Plate Harness Female BLACK Luggage compartment lid





Carrosserie-kabelbundel naar kabelbundel voor nummerplaat-verlichting Vrouwelijk ZWART Kofferdeksel



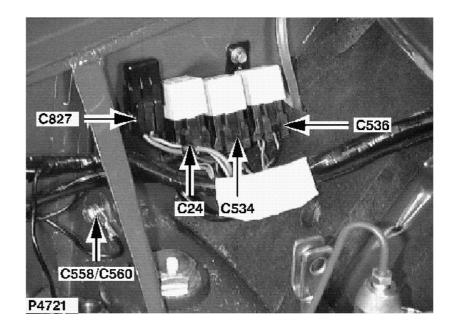


Mazo de cables de la carrocería al mazo de cables de matrícula Hembra NEGRO Capó trasero

Cav	Col	Cct
1	RB	ALL
2	В	ALL

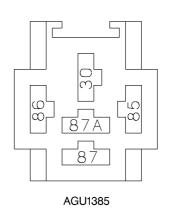


Front fog lamp relay Female BLACK Rear RH side of engine compartment



(NL)

Mistlamp voor - relais Vrouwelijk ZWART Rechter achterkant motorcompartiment



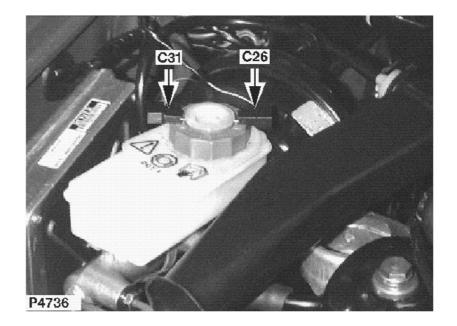
(E)

Relé de faros antiniebla delanteros Hembra NEGRO Parte trasera derecha del compartimento motor

Cav	Col	Cct
30	PU	ALL
85	UG	ALL
86	В	ALL
87	UG	ALL

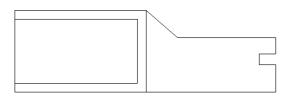


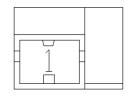
Brake fluid level switch Female BLACK RH side of engine compartment





Remvloeistofpeil - schakelaar Vrouwelijk ZWART Rechterkant motorcompartiment





YPC10165

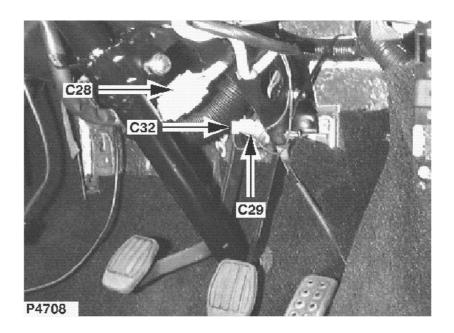


Interruptor del nivel de líquido de frenos Hembra NEGRO Lado derecho del compartimento motor

Cav	Col	Cct
1	BW	ALL

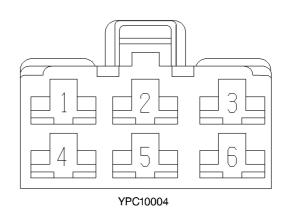


Ignition
Female
NATURAL
Left of steering column



(NL)

Ontsteking Vrouwelijk NATUREL links van stuurkolom



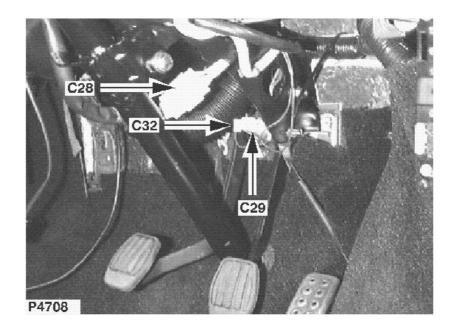


Encendido Hembra NATURAL lado izquierdo de la columna de dirección

Cav	Col	Cct
1	Z	ALL
2	Ν	ALL
3	G	ALL
4	Υ	ALL
5	WR	ALL
6	W	ALL

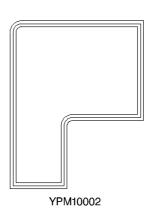


Brake pedal switch Female NATURAL Left of steering column





Rempedaal - schakelaar Vrouwelijk NATUREL links van stuurkolom



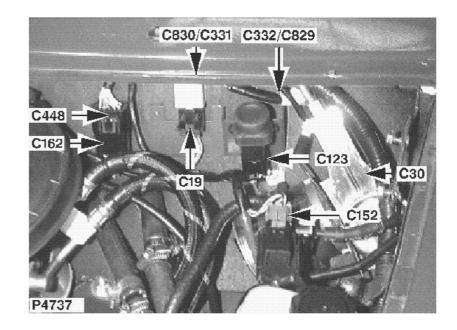


Interruptor del pedal de freno Hembra NATURAL lado izquierdo de la columna de dirección

Cav	Col	Cct
1	G	ALL

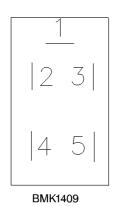


Windscreen wiper motor Female GREY LH side of bulkhead



(NL)

Ruitewissermotor Vrouwelijk LEIGRIJS Linkerkant tussenschot



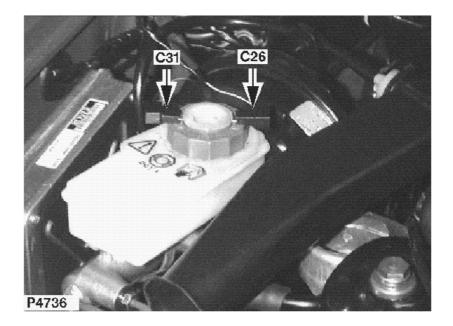
(E)

Motor de limpiaparabrisas Hembra PIZARRO (GRIS) Lado izquierdo del salpicadero

Cav	Col	Cct
1	В	ALL
2	NLG	ALL
3	ULG	ALL
4	LGO	ALL
5	RLG	ALL

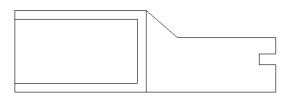


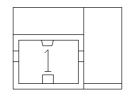
Brake fluid level switch Female BLACK RH side of engine compartment



(NL)

Remvloeistofpeil - schakelaar Vrouwelijk ZWART Rechterkant motorcompartiment





YPC10165

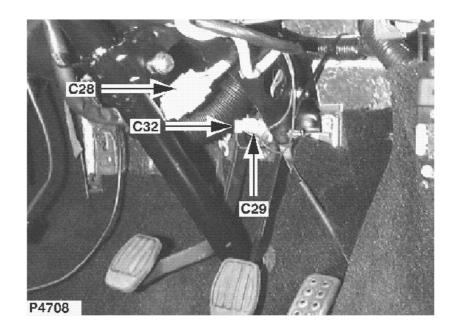


Interruptor del nivel de líquido de frenos Hembra NEGRO Lado derecho del compartimento motor

Cav	Col	Cct
1	В	ALL

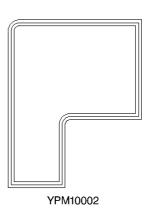


Brake pedal switch Female NATURAL Left of steering column



(NL)

Rempedaal - schakelaar Vrouwelijk NATUREL links van stuurkolom



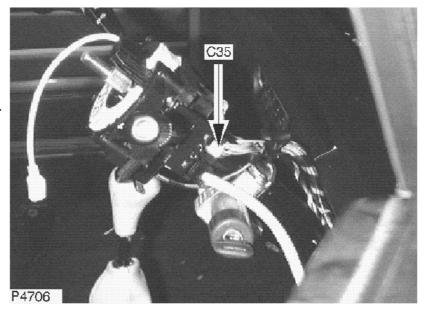
(E)

Interruptor del pedal de freno Hembra NATURAL lado izquierdo de la columna de dirección

Cav	Col	Cct
1	GP	ALL

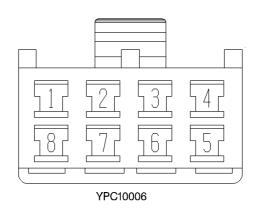


Front wiper switch
Female
NATURAL
Behind steering column cowl RH side





Voorruitwisser - schakelaar Vrouwelijk NATUREL Achter stuurkolomkap - rechts



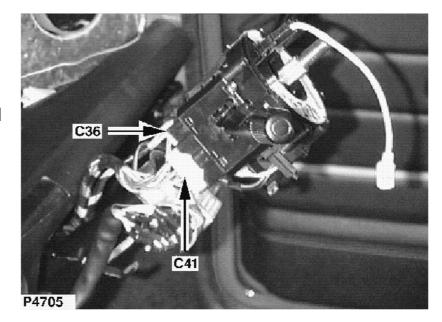


Interruptor de limpiaparabrisas Hembra NATURAL Debajo de la carcasa de la columna de dirección - Lado derecho

Cav	Col	Cct
1	LGO	ALL
2	LGG	ALL
3	ULG	ALL
4	RLG	ALL
5	LGO	ALL
7	NLG	ALL
8	OR	ALL

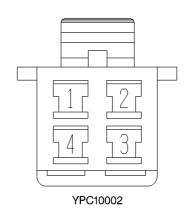


Direction indicator switch Female NATURAL Behind steering column cowl LH side



(NL)

Richtingaanwijzers staafschakelaar Vrouwelijk NATUREL Achter stuurkolomkap - links





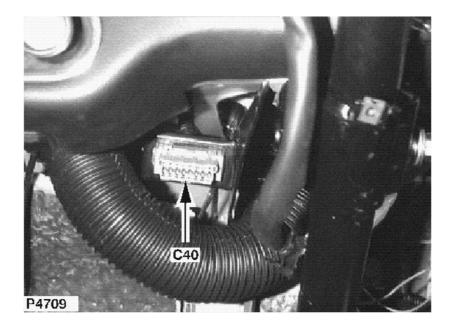
Interruptor de intermitentes de dirección Hembra NATURAL Detrás del costado izquierdo

Detrás del costado izquierdo de la carcasa de la columna de dirección

Cav	Col	Cct
1	GR	ALL
2	LGN	ALL
4	GW	ALL

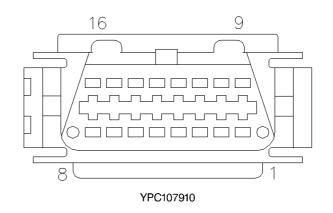


Diagnostic socket Female GREY Under RH side of fascia



(NL)

Diagnose-aansluiting Vrouwelijk LEIGRIJS Onder rechterkant dashboard



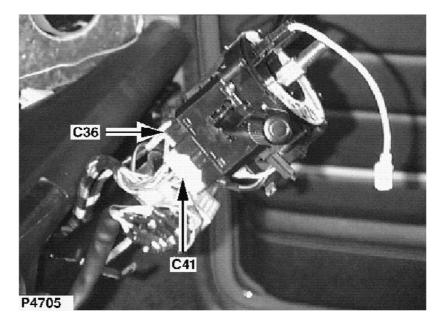


Enchufe de diagnóstico Hembra PIZARRO (GRIS) Debajo del lado derecho del tablero

Cav	Col	Cct
1	PS	ALL
3	RG	ALL
4	В	ALL
7	WY	ALL
13	YK	ALL
16	Ρ	ALL

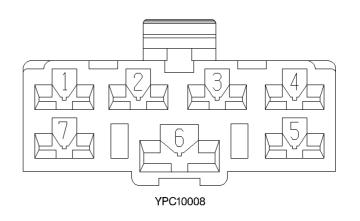


Lighting switch
Female
NATURAL
Behind steering column cowl
LH side



(NL)

Verlichtingsschakelaar Vrouwelijk NATUREL Achter stuurkolomkap - links



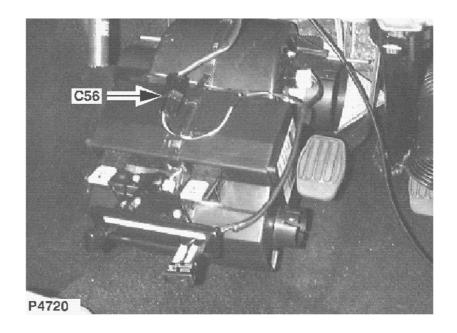
(E)

Interruptor de alumbrado
Hembra
NATURAL
Detrás del costado izquierdo
de la carcasa de la columna
de dirección

Cav	Col	Cct
1	J	ALL
2	UR	ALL
3	N	ALL
4	R	ALL
5	UW	ALL
6	N	ALL

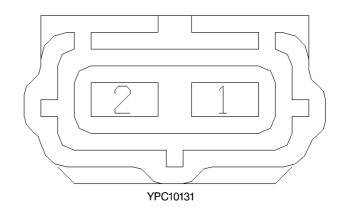


Blower fan Female RED Behind centre of fascia





Ventilator Vrouwelijk ROOD achter middelste gedeelte dashboard



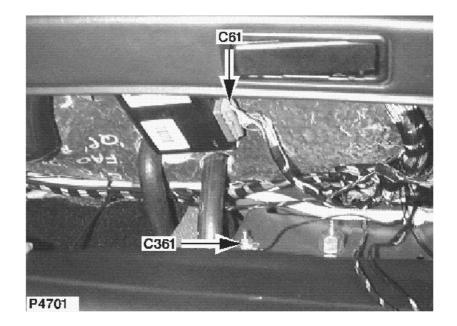


Ventilador de soplante Hembra ROJO detrás de la parte central del tablero

Cav	Col	Cct
1	LGO	ALL
2	В	ALL

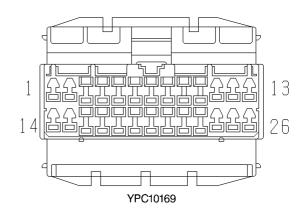


Alarm ECU Female GREY Behind centre of fascia



(NL)

Alarm - ECU Vrouwelijk LEIGRIJS achter middelste gedeelte dashboard



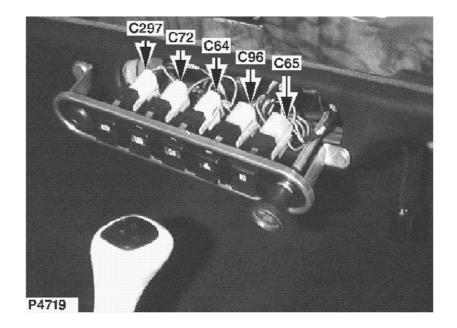
(E)

UEC de alarma Hembra PIZARRO (GRIS) detrás de la parte central del tablero

Cav	Col	Cct	Cav	Col	Cct
1	V	ALL	17	ΥN	ALL
2	В	ALL	18	PR	ALL
7	PW	ALL	19	В	ALL
8	PB	ALL	21	PK	ALL
တ	WS	ALL	23	WR	ALL
10	WY	ALL	24	PS	ALL
16	RG	ALL	26	Р	ALL

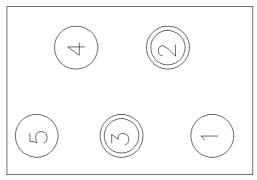


Rear fog lamp switch Female NATURAL Behind centre of fascia





Mistachterlamp - schakelaar Vrouwelijk NATUREL achter middelste gedeelte dashboard



13H9745

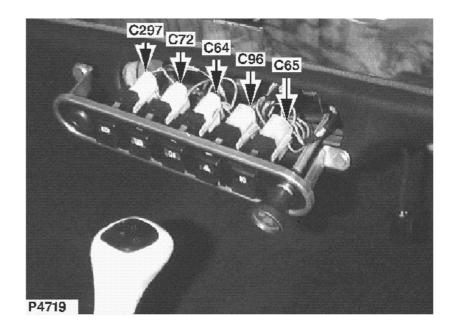


Interruptor de pilotos antiniebla traseros Hembra NATURAL detrás de la parte central del tablero

Cav	Col	Cct
2	UO	ALL
3	UY	ALL

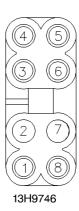


Front fog lamp switch Female NATURAL Behind centre of fascia



(NL)

Mistlamp voor - schakelaar Vrouwelijk NATUREL achter middelste gedeelte dashboard



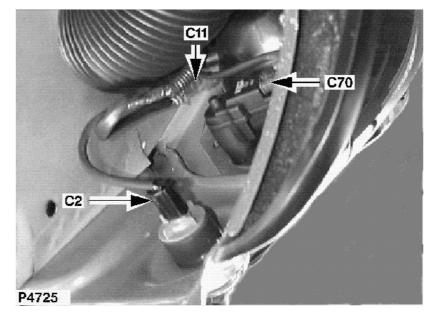
(E)

Interruptor de faros antiniebla delanteros Hembra NATURAL detrás de la parte central del tablero

Cav	Col	Cct
1	G	ALL
4	UW	ALL
5	UB	ALL
8	RB	ALL

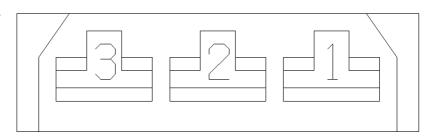


RH headlamp levelling motor Female NATURAL Behind RH headlamp





Rechter koplamp-nivellering motor Vrouwelijk NATUREL Achter rechter koplamp



YPC10426



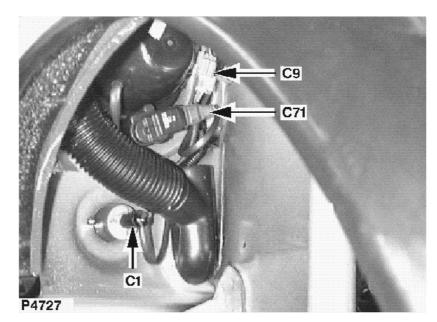
Motor de nivelación del faro derecho Hembra NATURAL

Detrás del faro derecho

Cav	Col	Cct
1	UG	ALL
2	В	ALL
3	R	ALL

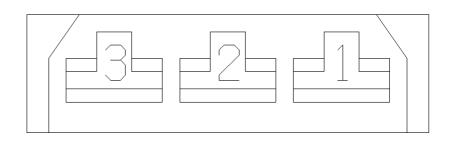


LH headlamp levelling motor Female NATURAL Behind LH headlamp



(NL)

Linker koplamp-nivellering motor Vrouwelijk NATUREL Achter linker koplamp



YPC10426

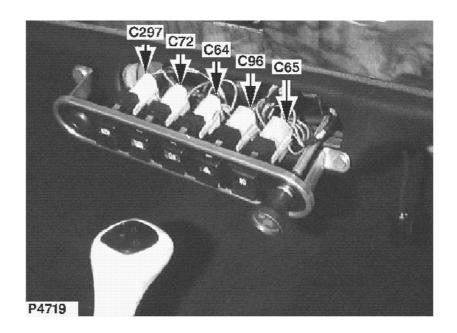


Motor de nivelación del faro izquierdo Hembra NATURAL Detrás del faro izquierdo

Cav	Col	Cct
1	G	ALL
2	В	ALL
3	R	ALL

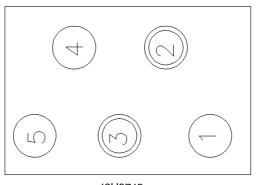


Heated rear window switch Female NATURAL Behind centre of fascia





Verwarmde achterruit schakelaar Vrouwelijk NATUREL achter middelste gedeelte dashboard



13H9745

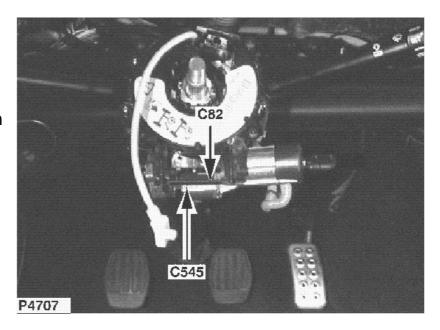


Interruptor de luneta térmica Hembra NATURAL detrás de la parte central del tablero

Cav	Col	Cct
2	GY	ALL
3	G	ALL

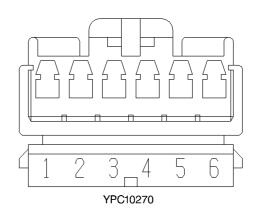


Rotary coupler Female WHITE Underside of steering column



(NL)

ROTERENDE KOPPELING Vrouwelijk WIT onderkant van stuurkolom



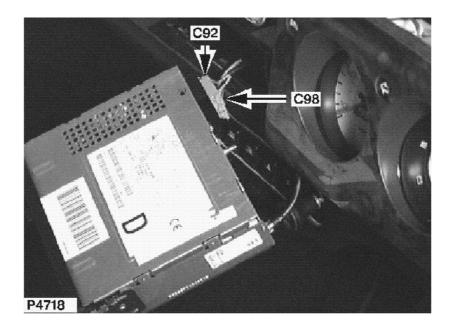
E

ACOPLADOR GIRATORIO Hembra BLANCO parte inferior de la columna de dirección

Cav	Col	Cct
4	PB	ALL
6	В	ALL

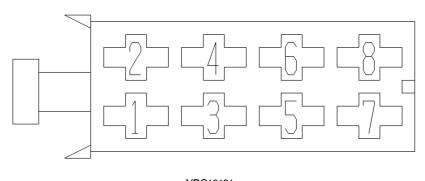


Radio speakers Female BROWN Behind radio



(NL)

Radio - luidsprekers Vrouwelijk BRUIN Achter radio



YPC10191

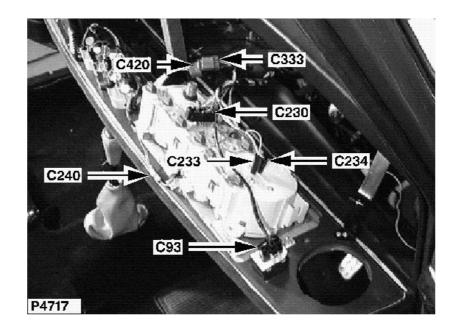


Altavoces de radio Hembra MARRON Detrás de la radio

Cav	Col	Cct
1	SK	ALL
2	SB	ALL
7	UK	ALL
8	UB	ALL

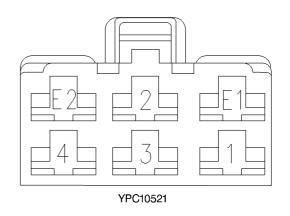


Headlamp levelling switch Female BLACK Behind RH side of fascia



(NL)

Koplamp-nivellering schakelaar Vrouwelijk ZWART Achter rechterkant dashboard



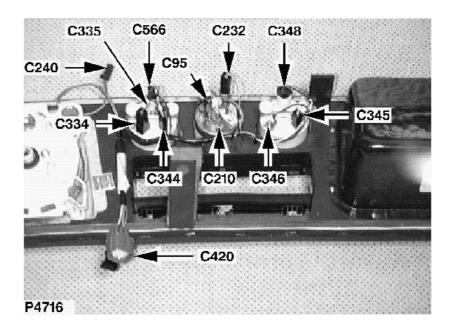
(E)

Mando de nivelación de faros Hembra NEGRO Detrás del lado derecho del tablero

Cav	Col	Cct
1	R	ALL
2	UG	ALL
4	R	ALL
E2	В	ALL

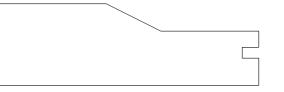


Clock Female BLACK Behind centre of fascia





Klok
Vrouwelijk
ZWART
achter middelste gedeelte
dashboard





AAU1010

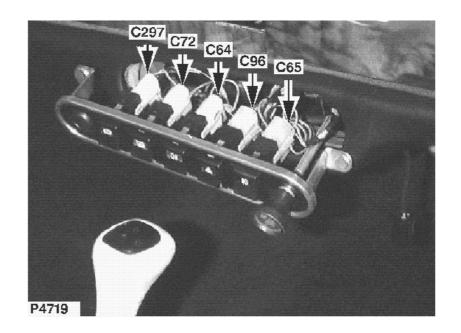


Reloj Hembra NEGRO detrás de la parte central del tablero

Cav	Col	Cct
1	РО	All

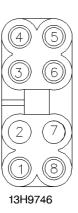


Hazard warning switch Female NATURAL Behind centre of fascia



(NL)

Alarmknipperlichten schakelaar Vrouwelijk NATUREL achter middelste gedeelte dashboard



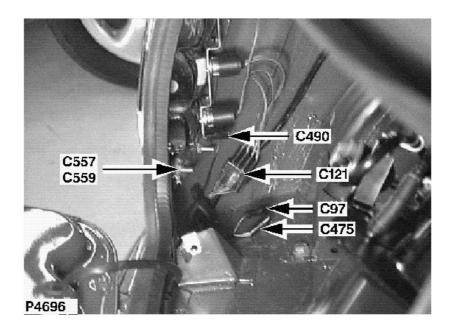
(E)

Interruptor de luces intermitentes de emergencia Hembra NATURAL detrás de la parte central del tablero

Cav	Col	Cct
3	LGK	ALL
4	GR	ALL
5	GW	ALL
6	GLG	ALL

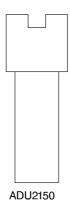


Rear fog lamp Male BLACK Luggage compartment - LH side





Mistachterlamp Mannelijk ZWART bagageruimte - Links



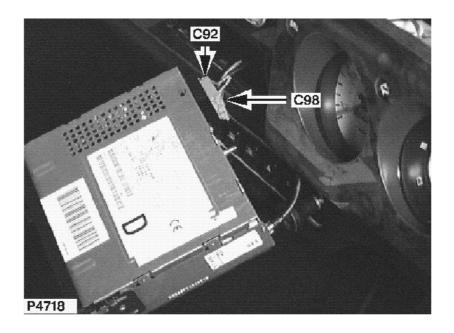


Piloto antiniebla trasero Macho NEGRO maletero - Lado izquierdo

Cav	Col	Cct
1	В	ALL

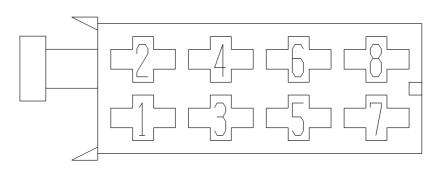


Radio/cassette player Female GREY Behind radio



(NL)

Radio/cassette-speler Vrouwelijk LEIGRIJS Achter radio



YPC10190

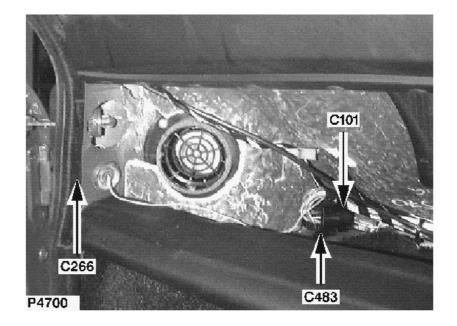


Radio/cassette Hembra PIZARRO (GRIS) Detrás de la radio

Cav	Col	Cct
4	РО	ALL
7	LGW	ALL
8	В	ALL

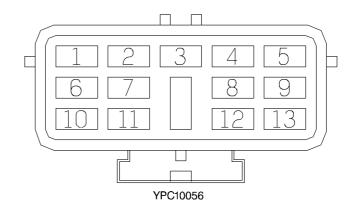


Body Harness to Main Harness Male BLACK LH 'A' post



(NL)

Carrosserie-kabelbundel naar hoofdkabelbundel Mannelijk ZWART Linker 'A' stijl



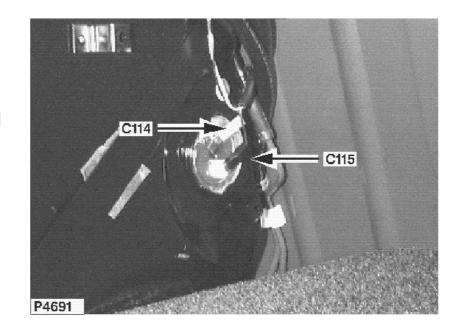


Mazo de cables de la carrocería al mazo de cables principal Macho NEGRO Pilar A izquierdo

Cav	Col	Cct	Cav	Col	Cct
1	GP	ALL	7	GB	ALL
2	UY	ALL	9	PK	ALL
3	GN	ALL	10	WP	ALL
4	GW	ALL	11	OR	ALL
5	GR	ALL	12	RW	ALL
6	RB	ALL	13	GY	ALL

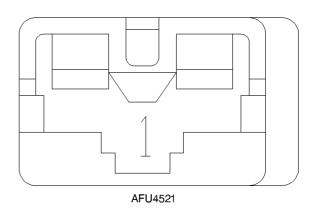


Fuel pump Female NATURAL Luggage compartment - LH side



(NL)

Brandstofpomp Vrouwelijk NATUREL bagageruimte - Links



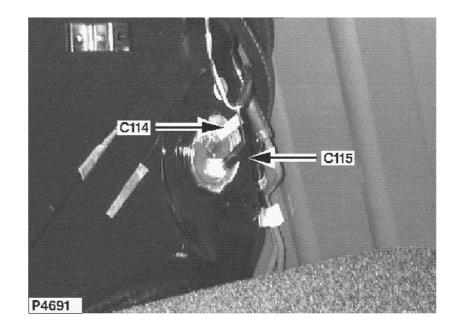
(E)

Bomba de combustible Hembra NATURAL maletero - Lado izquierdo

Cav	Col	Cct
1	В	ALL

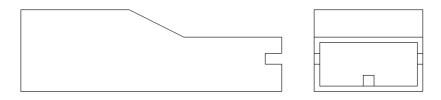


Fuel sender unit Female BLACK Luggage compartment - LH side



(NL)

Brandstof - zendelement Vrouwelijk ZWART bagageruimte - Links



AAU1010

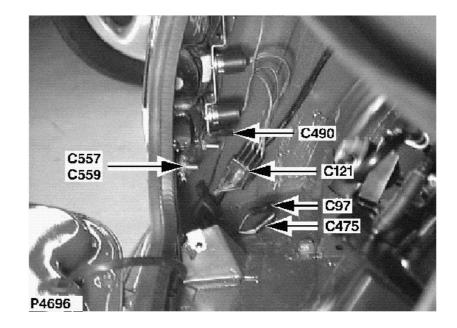


Sensor de nivel de combustible Hembra NEGRO maletero - Lado izquierdo

Cav	Col	Cct
1	GB	ALL

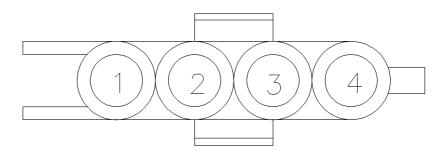


LH tail lamp Female BLACK Luggage compartment - LH side



(NL)

Linker achterlicht Vrouwelijk ZWART bagageruimte - Links



ADU2160

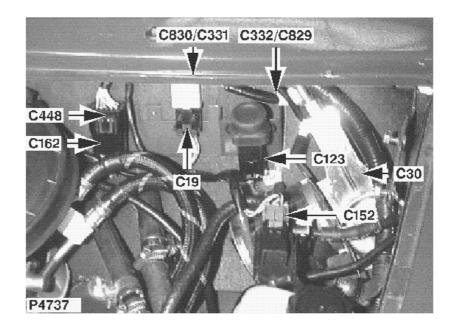


Piloto trasero izquierdo Hembra NEGRO maletero - Lado izquierdo

Cav	Col	Cct
1	GN	ALL
2	RB	ALL
3	GP	ALL
4	GR	ALL

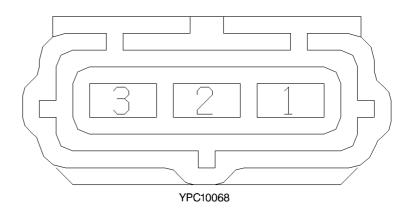


Inertia switch
Female
BLACK
LH side of bulkhead



(NL)

Inertieschakelaar Vrouwelijk ZWART Linkerkant tussenschot



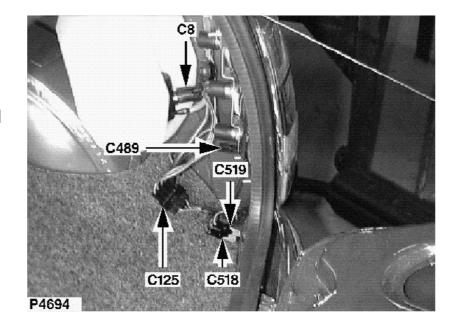


Interruptor inercial Hembra NEGRO Lado izquierdo del salpicadero

Cav	Col Cct			
1	NS	ALL		
3	WP	ALL		

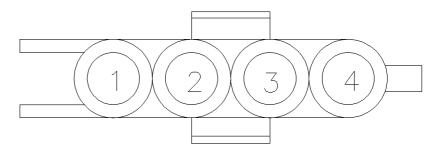


RH tail lamp Female BLACK Luggage compartment - RH side



(NL)

Rechter achterlicht Vrouwelijk ZWART bagageruimte - Rechts



ADU2160

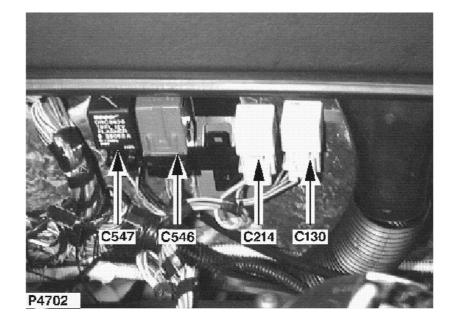


Piloto trasero derecho Hembra NEGRO maletero - Lado derecho

Cav	Col	Cct
1	GN	ALL
2	RW	ALL
3	GP	ALL
4	GW	ALL

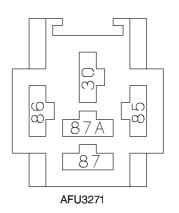


Horn relay Female YELLOW Behind centre of fascia





Claxon - relais Vrouwelijk GEEL achter middelste gedeelte dashboard





Relé de bocina Hembra AMARILLO detrás de la parte central del tablero

Cav	Col	Cct
30	Ρ	ALL
85	Р	ALL
86	PB	ALL
87	PB	ALL

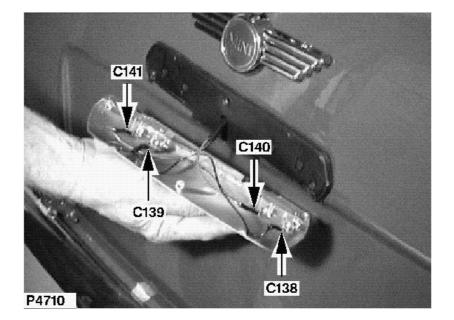


Number plate illumination lamp(s)

Female

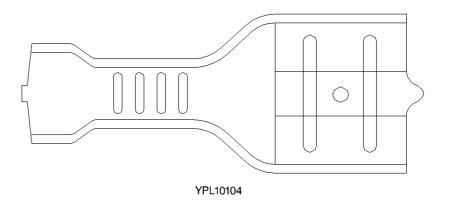
BRASS

Boot lid - inside



(NL)

Nummerplaatverlichting lamp(en) Vrouwelijk KOPER Kofferdeksel - binnenkant

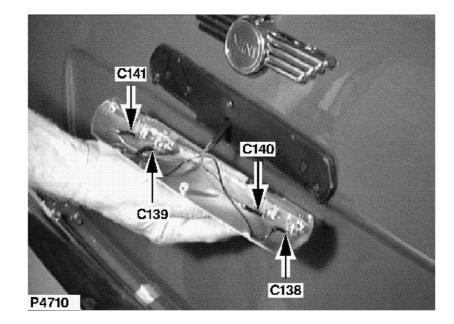


(E)

Cav	Col	Cct		
1	В	ALL		

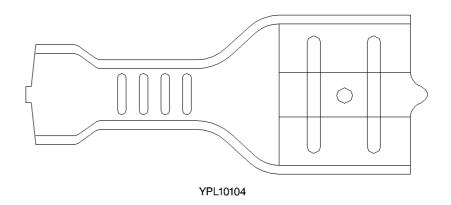


Number plate illumination lamp(s) Female BRASS Boot lid - inside



(NL)

Nummerplaatverlichting lamp(en) Vrouwelijk KOPER Kofferdeksel - binnenkant





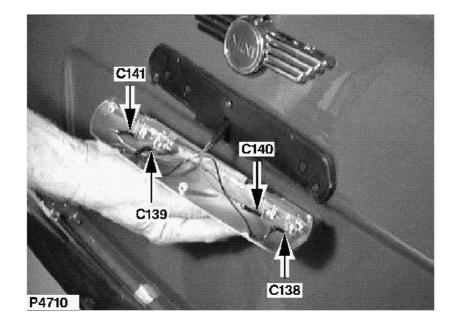
Cav	Col	Cct	
1	В	ALL	



Number plate illumination lamp(s) Female

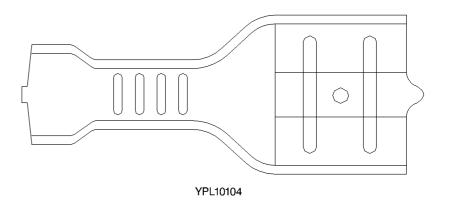
BRASS

Boot lid - inside



(NL)

Nummerplaatverlichting lamp(en) Vrouwelijk **KOPER** Kofferdeksel - binnenkant

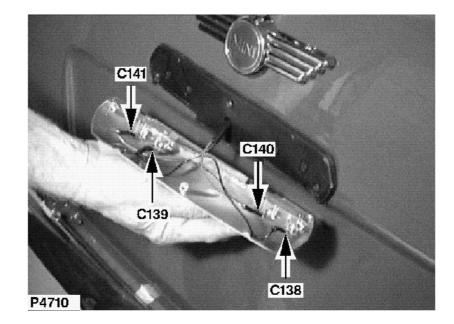


(E)

Cav	Col	Cct	
1	R	ALL	

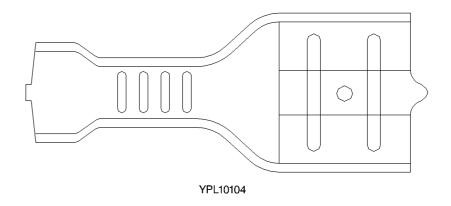


Number plate illumination lamp(s) Female BRASS Boot lid - inside



(NL)

Nummerplaatverlichting lamp(en) Vrouwelijk KOPER Kofferdeksel - binnenkant

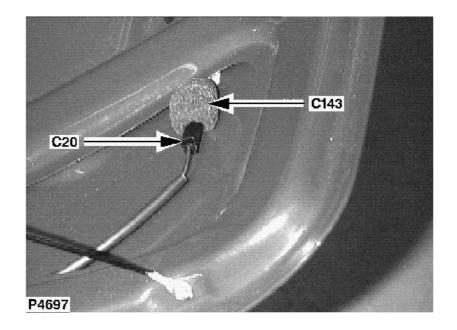




Cav	Col	Cct		
1	R	ALL		

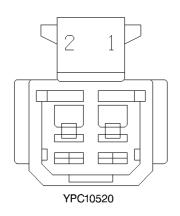


Number Plate Harness to Body Harness Male BLACK Luggage compartment lid





Kabelbundel voor nummerplaat-verlichting naar carrosserie-kabelbundel Mannelijk ZWART Kofferdeksel



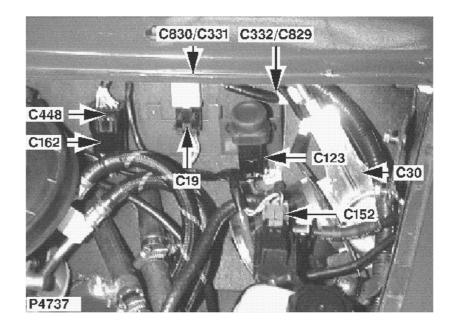


Mazo de cables de matrícula al mazo de cables de la carrocería Macho NEGRO Capó trasero

Cav	Col	Cct
1	В	ALL
2	R	ALL

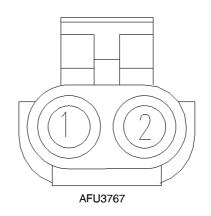


Purge valve Male GREY LH side of bulkhead





Spuiklep Mannelijk LEIGRIJS Linkerkant tussenschot



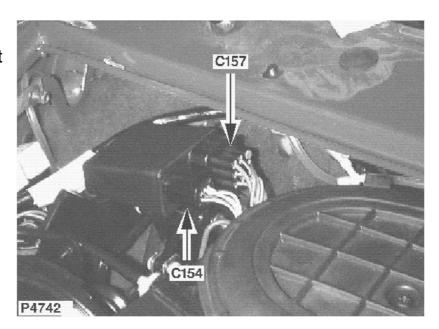


Válvula de purga Macho PIZARRO (GRIS) Lado izquierdo del salpicadero

Cav	Col	Cct
1	BW	ALL
2	NK	ALL

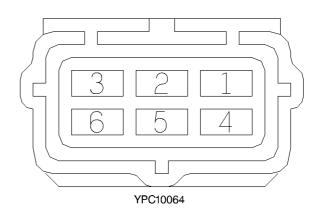


Modular engine management (MEMS) relay module Female BLACK Rear RH side of engine compartment





Modulair motormanagementsysteem (MEMS) - relais-module Vrouwelijk ZWART Rechter achterkant motorcompartiment



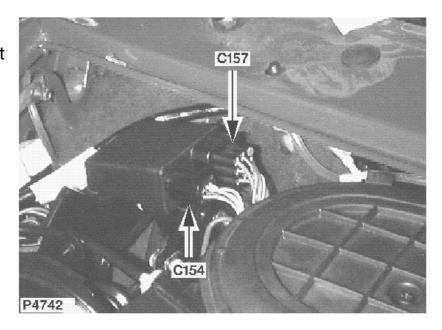


Módulo de relés de gestión del motor (MEMS) Hembra NEGRO Parte trasera derecha del compartimento motor

Cav	Col	Cct
1	BP	ALL
2	W	ALL
3	WK	ALL
4	WR	ALL
5	BG	ALL
6	WK	ALL

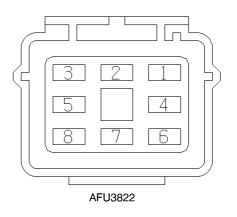


Modular engine management (MEMS) relay module Female BLACK Rear RH side of engine compartment





Modulair motormanagementsysteem (MEMS) - relais-module Vrouwelijk ZWART Rechter achterkant motorcompartiment



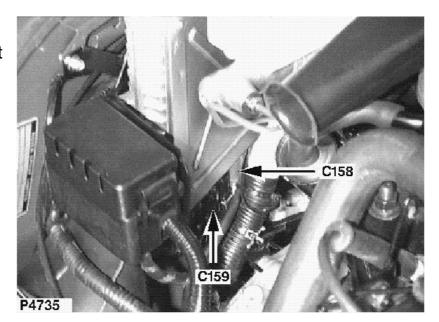


Módulo de relés de gestión del motor (MEMS) Hembra NEGRO Parte trasera derecha del compartimento motor

Cav	Col	Cct
1	Ν	ALL
2	UR	ALL
4	NS	ALL
5	NR	ALL
6	Ν	ALL
7	Z	ALL
8	NK	ALL

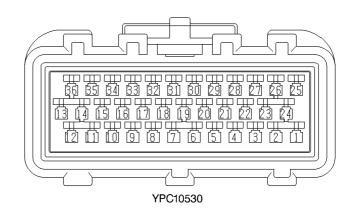


Modular engine management control unit Female RED RH side of engine compartment



(NL)

Modulair motormanagementsysteem regeleenheid Vrouwelijk ROOD Rechterkant motorcompartiment





Unidad de control modular de gestión del motor Hembra

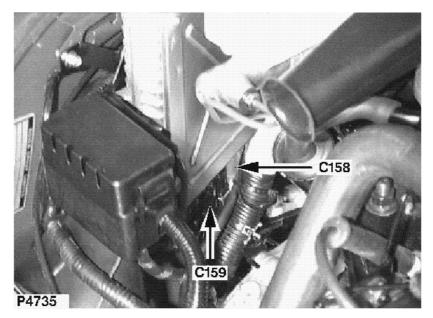
ROJO

Lado derecho del compartimento motor

Cav	Col	Cct	Cav	Col	Cct	Cav	Col	Cct
1	RY	ALL	16	В	ALL	28	LGS	ALL
2	BU	ALL	17	BW	ALL	31	WY	ALL
10	OG	ALL	23	В	ALL	33	KU	ALL
12	ΥN	ALL	24	В	ALL	34	OS	ALL
13	ΥN	ALL	25	UP	ALL	35	YR	ALL
14	YR	ALL	26	WU	ALL			
15	OU	ALL	27	S	ALL			

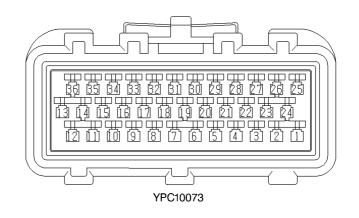


Modular engine management control unit Female BLACK RH side of engine compartment



(NL)

Modulair motormanagementsysteem regeleenheid Vrouwelijk ZWART Rechterkant motorcompartiment



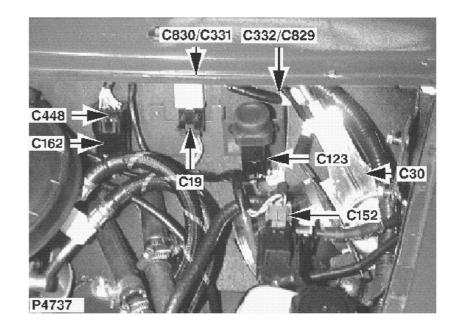


Unidad de control modular de gestión del motor Hembra NEGRO Lado derecho del compartimento motor

Cav	Col	Cct	Cav	Col	Cct	Cav	Col	Cct
8	ΥP	ALL	18	ΥP	ALL	27	NK	ALL
12	Y Y	ALL	20	BG	ALL	28	LGB	ALL
13	KB	ALL	21	В	ALL	30	BP	ALL
14	B	ALL	22	WK	ALL	31	KG	ALL
15	KG	ALL	25	WB	ALL	33	W	ALL
17	WS	ALL	26	WS	ALL	36	RG	ALL

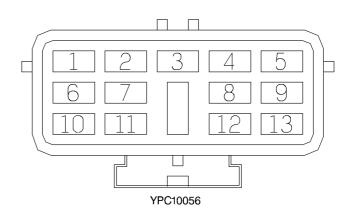


Engine Harness to Main Harness Male BLACK LH side of bulkhead



(NL)

Motor-kabelbundel naar hoofdkabelbundel Mannelijk ZWART Linkerkant tussenschot



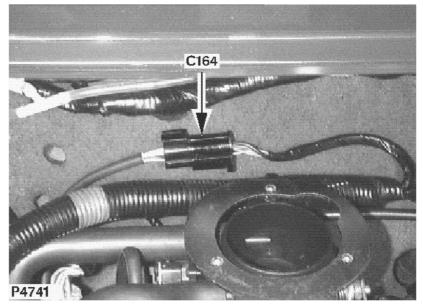
(E)

Mazo de cables motor al mazo de cables principal Macho NEGRO Lado izquierdo del salpicadero

Cav	Col	Cct	Cav	Col	Cct
1	W	ALL	7	NY	ALL
2	WK	ALL	8	WN	ALL
3	KG	ALL	9	LGB	ALL
4	NS	ALL	10	WR	ALL
5	WS	ALL	11	WY	ALL
6	WB	ALL	12	NU	ALL

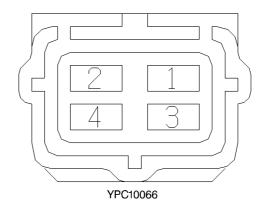


Oxygen sensor Female BLACK Rear of engine compartment centre





Zuurstofsensor Vrouwelijk ZWART achterkant motorcompartiment - midden



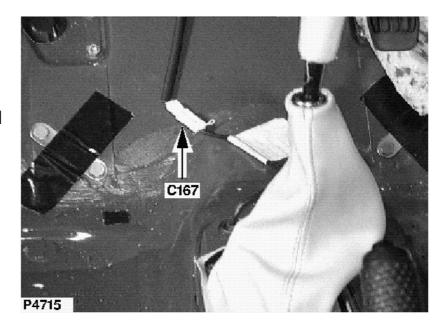


Sensor de oxígeno Hembra NEGRO parte trasera del compartimento motor - centro

Cav	Col	Cct
1	S	ALL
2	LGS	ALL
3	В	ALL
4	UR	ALL

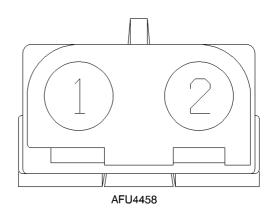


Reverse lamp switch Female WHITE Beneath footwell carpet - RH side



(NL)

Achteruitrijlamp - schakelaar Vrouwelijk WIT onder vloerbedekking -Rechts



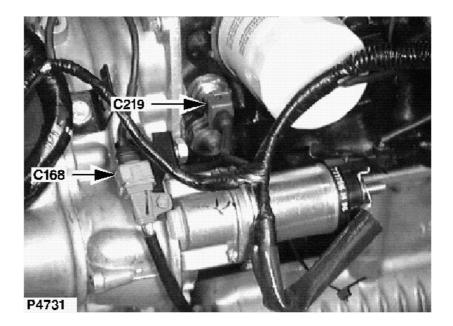
(E)

Interruptor del piloto de marcha atrás Hembra BLANCO debajo de la moqueta del hueco para los pies - Lado derecho

Cav	Col	Cct
1	G	ALL
2	GN	ALL

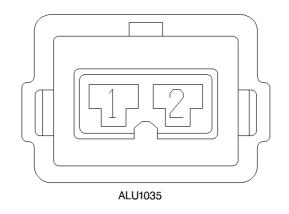


Crankshaft sensor Female BLUE Lower front of engine - RH side





Kruksensor Vrouwelijk BLAUW Onder/voorkant motor -Rechts



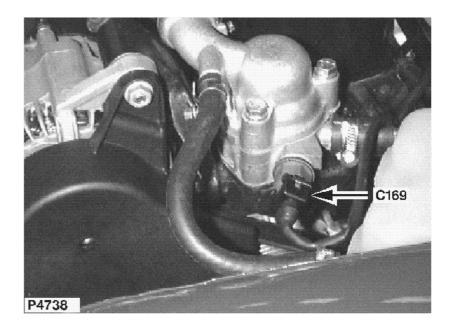


Sensor del cigüeñal Hembra AZUL Parte delantera inferior del motor - Lado derecho

Cav	Col	Cct
1	WU	ALL
2	UP	ALL

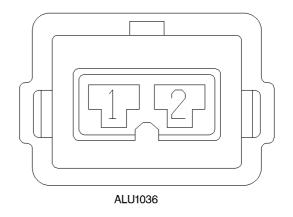


Coolant temperature (tw) sensor Female BROWN LH side of engine





Koelvloeistoftemperatuur (tw)
- sensor
Vrouwelijk
BRUIN
Linkerkant motor



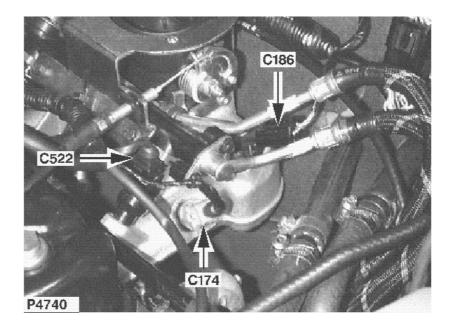


Sensor de temperatura de refrigerante (tw) Hembra MARRON Lado izquierdo del motor

Cav	Col	Cct
1	KB	ALL
2	KG	ALL

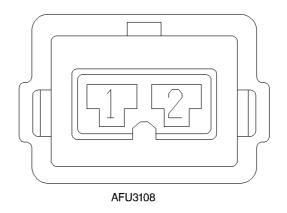


Inlet air temperature (ta) sensor Female GREEN Top rear of engine - centre





Inlaatluchttemperatuur (ta) sensor Vrouwelijk GROEN boven/achterkant motor midden



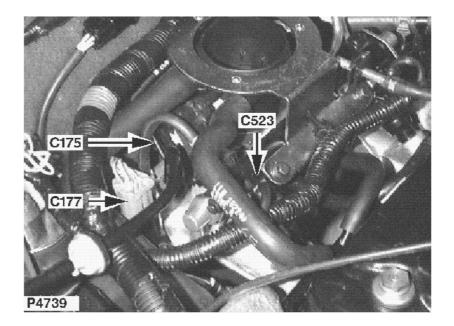


Sensor de temperatura del aire de admisión (ta) Hembra VERDE parte superior trasera del motor - centro

Cav	Col	Cct
1	KB	ALL
2	GB	ALL

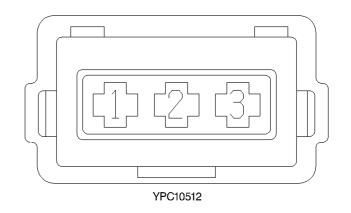


Throttle position sensor Female BLACK Top rear of engine - centre



(NL)

Gaspedaalpositie - sensor Vrouwelijk ZWART boven/achterkant motor midden



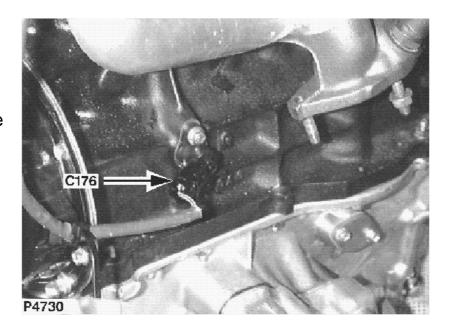
E

Sensor de posición del pedal de acelerador Hembra NEGRO parte superior trasera del motor - centro

Cav	Col	Cct
1	ΥP	ALL
2	YG	ALL
3	KB	ALL

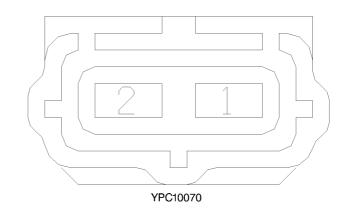


Camshaft sensor Female BLACK Lower rear of engine - centre



NL

Nokkenas - sensor Vrouwelijk ZWART onder/achterkant motor midden



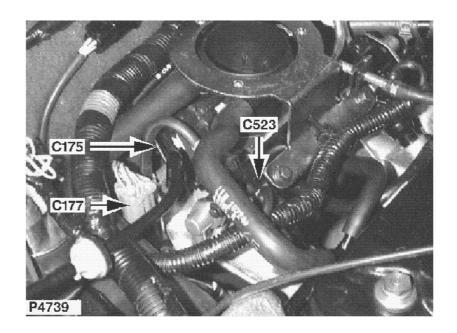
E

Sensor del árbol de levas Hembra NEGRO parte inferior trasera del motor - centro

Cav	Col	Cct
1	BU	ALL
2	RY	ALL

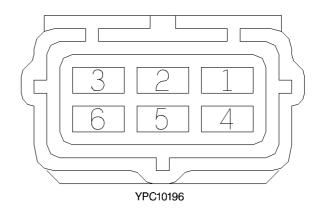


Stepper motor Female BLUE Top rear of engine - centre



(NL)

Stepper-motor Vrouwelijk BLAUW boven/achterkant motor midden



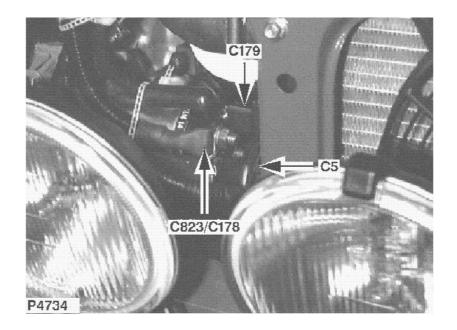
(E)

Motor paso a paso Hembra AZUL parte superior trasera del motor - centro

Cav	Col	Cct
1	OS	ALL
2	NK	ALL
3	KU	ALL
4	OU	ALL
6	OG	ALL

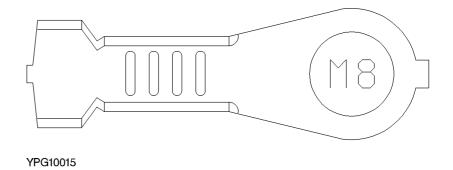


Starter motor/solenoid Eyelet TIN-PLATE Lower front of engine - RH side



(NL)

Startmotor/solenoïde Oogje VERTIND Onder/voorkant motor -Rechts



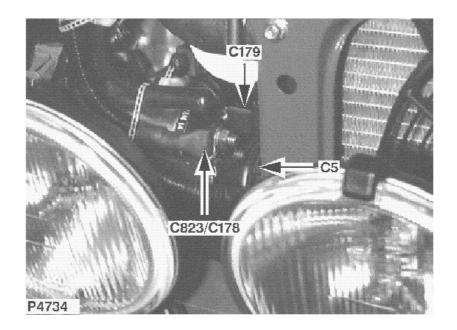


Motor/solenoide de arranque Ollao PLACA ESTAÑO Parte delantera inferior del motor - Lado derecho

Cav	Col	Cct
1	Z	ALL

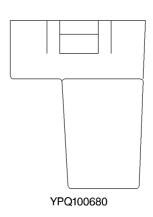


Starter motor/solenoid Female BLACK Lower front of engine - RH side



(NL)

Startmotor/solenoïde Vrouwelijk ZWART Onder/voorkant motor -Rechts



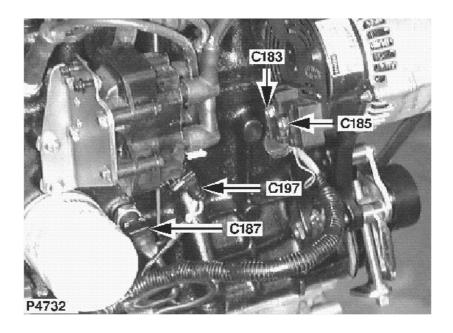
(E)

Motor/solenoide de arranque Hembra NEGRO Parte delantera inferior del motor - Lado derecho

Cav	Col	Cct
1	NR	ALL

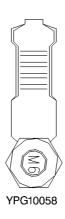


Alternator Eyelet BRASS, TIN-PLATED Front of engine - centre





Wisselstroomdynamo Oogje KOPER Voorkant motor - midden



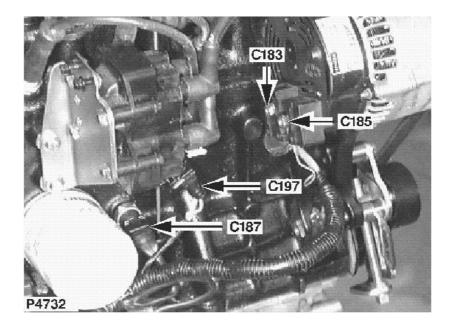


Alternador
Ollao
LATON
Parte delantera del motor centro

Cav	Col	Cct
1	NP	ALL

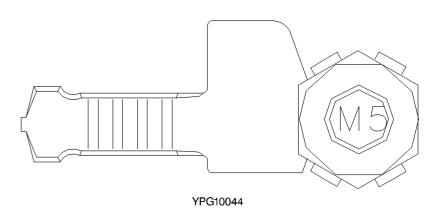


Alternator output Eyelet BRASS Front of engine - centre



(NL)

Wisselstroomdynamo uitvoer Oogje KOPER Voorkant motor - midden



(E)

Salida del alternador

Ollao

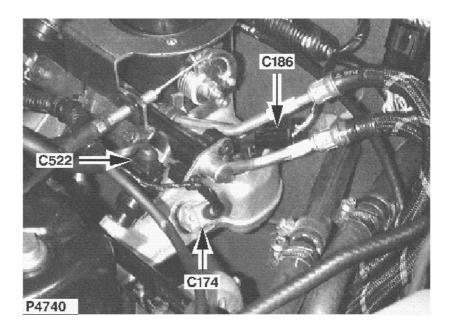
LATON

Parte delantera del motor - centro

Cav	Col	Cct
1	NY	ALL

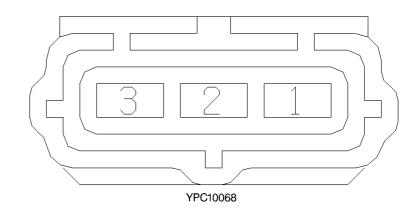


Map sensor Female BLACK Top rear of engine - centre





Map-sensor Vrouwelijk ZWART boven/achterkant motor midden



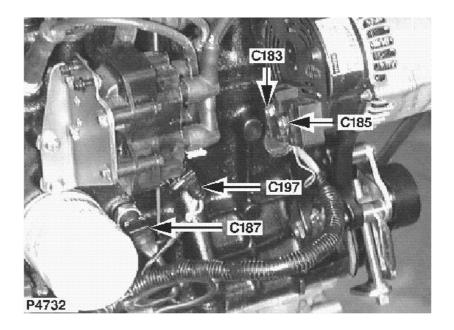


Sensor map
Hembra
NEGRO
parte superior trasera del
motor - centro

Cav	Col	Cct
1	KB	ALL
2	RG	ALL
3	YP	ALL

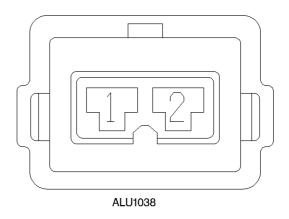


Oil pressure switch Female BLACK Front of engine - centre



(NL)

Oliedrukschakelaar Vrouwelijk ZWART Voorkant motor - midden



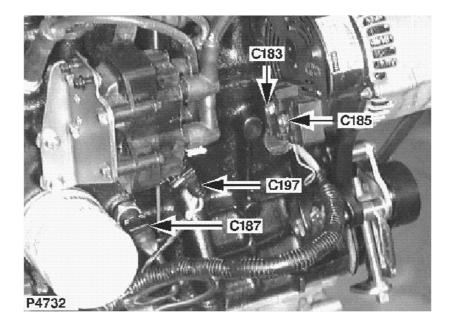
(E)

Presostato de aceite Hembra NEGRO Parte delantera del motor centro

Cav	Col	Cct
1	WN	ALL

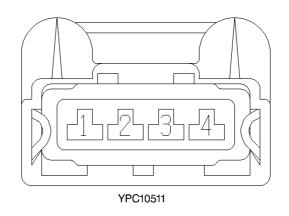


Ignition coil Female BLACK Front of engine - centre





Bobine Vrouwelijk ZWART Voorkant motor - midden



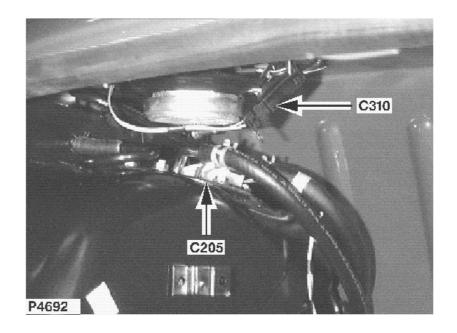


Bobina de encendido Hembra NEGRO Parte delantera del motor centro

Cav	Col	Cct
1	WB	ALL
2	WS	ALL
3	NK	ALL

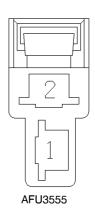


Fuel pump Female NATURAL Luggage compartment - LH side



(NL)

Brandstofpomp Vrouwelijk NATUREL bagageruimte - Links



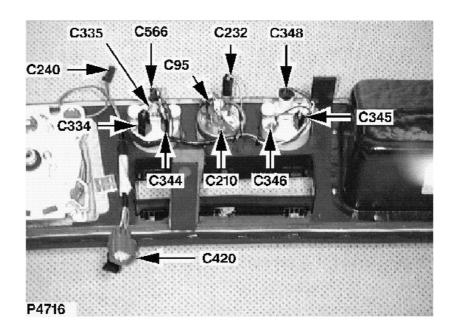
E

Bomba de combustible Hembra NATURAL maletero - Lado izquierdo

Cav	Col	Cct
1	В	ALL
2	WP	ALL

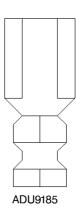


Clock Female PHOS-BRON Behind centre of fascia





Klok Vrouwelijk FOSFORBRONS achter middelste gedeelte dashboard



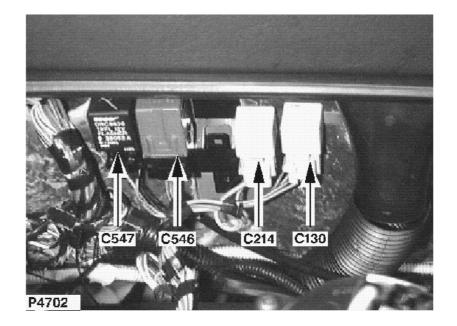


Reloj Hembra BRONCE FOSFOROSO detrás de la parte central del tablero

Cav	Cav Col Co	
1	В	ALL

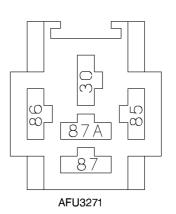


Auxiliary relay
Female
YELLOW
Behind centre of fascia



(NL)

Hulprelais Vrouwelijk GEEL achter middelste gedeelte dashboard



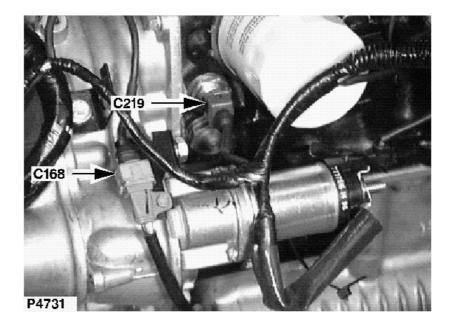
(E)

Relé auxiliar Hembra AMARILLO detrás de la parte central del tablero

Cav	Col	Cct
30	Z	ALL
85	LG	ALL
86	В	ALL
87	LGW	ALL

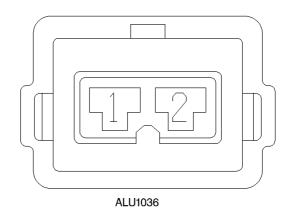


Oil temperature sensor Female BROWN Lower front of engine - RH side





Olietemperatuur - sensor Vrouwelijk BRUIN Onder/voorkant motor -Rechts



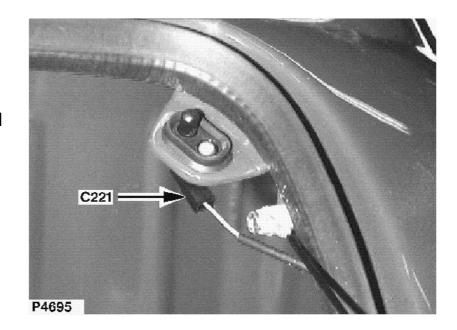


Sensor de temperatura del aceite Hembra MARRON Parte delantera inferior del motor - Lado derecho

Cav	Col	Cct
1	NU	ALL

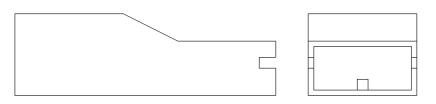


Boot switch Female BLACK Luggage compartment - RH side



(NL)

Kofferdeksel - schakelaar Vrouwelijk ZWART bagageruimte - Rechts



AAU1010

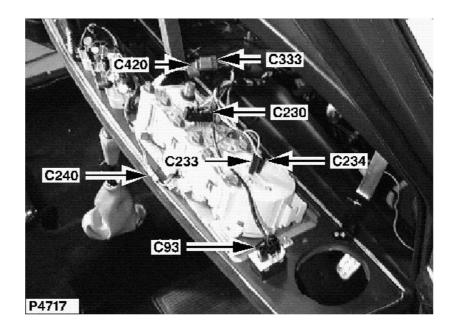


Interruptor del maletero Hembra NEGRO maletero - Lado derecho

Cav	Col	Cct
1	PK	ALL



Instrument pack
Female
BLACK
Behind RH side of fascia



(NL)

Combinatie-instrument Vrouwelijk ZWART Achter rechterkant dashboard

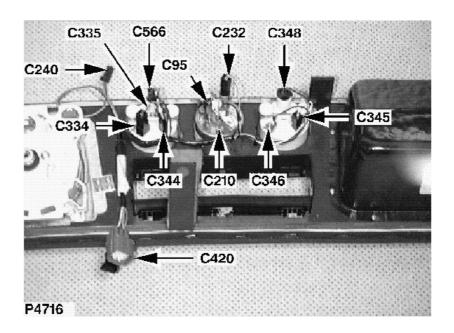


Grupo de instrumentos Hembra NEGRO Detrás del lado derecho del tablero

Cav	Col	Cct	Cav	Col	Cct
1	GW	ALL	7	Р	ALL
2	GB	ALL	8	W	ALL
3	GU	ALL	10	NY	ALL
4	UW	ALL	11	WN	ALL
5	В	ALL	12	RW	ALL
6	GR	ALL			



Clock Female BLACK Behind centre of fascia



(NL)

Klok Vrouwelijk ZWART achter middelste gedeelte dashboard

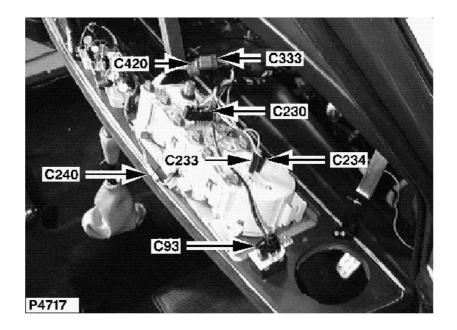


Reloj Hembra NEGRO detrás de la parte central del tablero

Cav	Col	Cct
1	RW	ALL
2	В	ALL

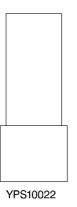


Instrument pack
Female
BLACK
Behind RH side of fascia



(NL)

Combinatie-instrument Vrouwelijk ZWART Achter rechterkant dashboard



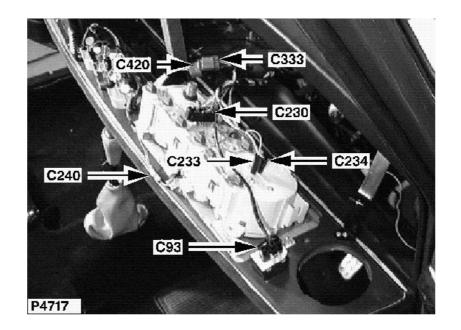


Grupo de instrumentos Hembra NEGRO Detrás del lado derecho del tablero

Cav	Col	Cct
1	WB	ALL

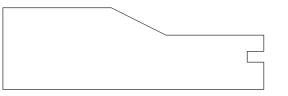


Instrument pack
Female
BLACK
Behind RH side of fascia



NL

Combinatie-instrument Vrouwelijk ZWART Achter rechterkant dashboard





AAU1010

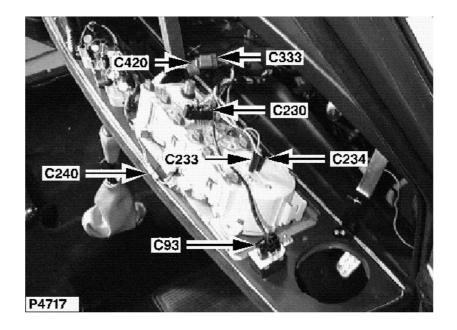


Grupo de instrumentos Hembra NEGRO Detrás del lado derecho del tablero

Cav	Col	Cct
1	W	ALL

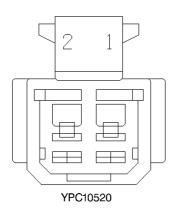


Alarm led Male BLACK Behind RH side of fascia



(NL)

ALARM LED Mannelijk ZWART Achter rechterkant dashboard



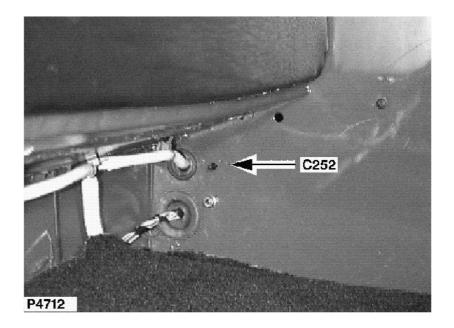


LED DE ALARMA Macho NEGRO Detrás del lado derecho del tablero

Cav	Col	Cct
1	ΥN	ALL
2	РО	ALL

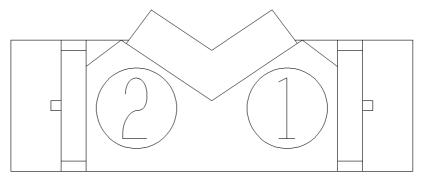


LH pre-tensioner Female RED Rear of LH rear door jamb



(NL)

LINKER
AUTOGORDELSPANNER
Vrouwelijk
ROOD
Achter deurstijl linker
achterportier



YPC10274

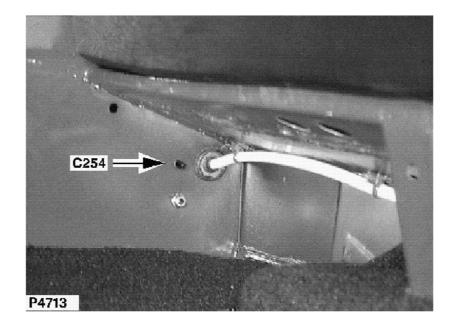


PRETENSOR IZQUIERDO Hembra ROJO Detrás de la jamba de la puerta trasera izquierda

Cav	Col	Cct
1	0	ALL
2	OU	ALL

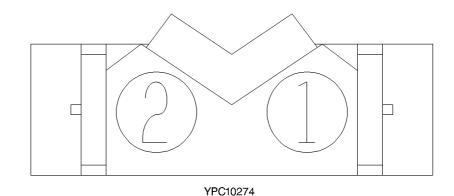


RH pre-tensioner Female RED Rear of RH rear door jamb



NL

RECHTER
AUTOGORDELSPANNER
Vrouwelijk
ROOD
Achter deurstijl rechter
achterportier



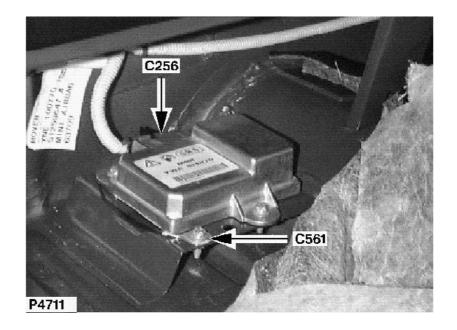


PRETENSOR DERECHO Hembra ROJO Detrás de la jamba de la puerta trasera derecha

Cav	Col	Cct
1	Ν	ALL
2	NR	ALL

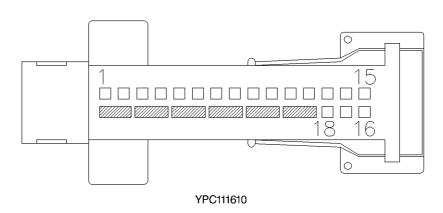


Airbag control unit Female RED Beneath rear seat



(NL)

Airbag - regeleenheid Vrouwelijk ROOD Onder achterbank



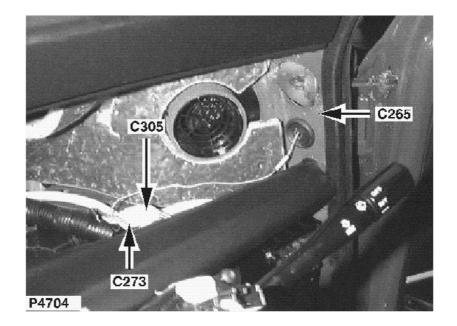


Unidad de control del airbag Hembra ROJO Debajo del asiento trasero

Cav	Col	Cct	Cav	Col	Cct
1	В	ALL	6	NR	ALL
2	Р	ALL	11	Υ	ALL
3	0	ALL	12	R	ALL
4	OU	ALL	14	YK	ALL
5	Ν	ALL	15	G	ALL

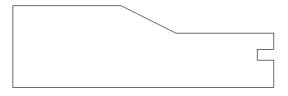


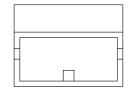
RH door switch Female BLACK Behind RH side of fascia





Rechter portier-schakelaar Vrouwelijk ZWART Achter rechterkant dashboard





AAU1010



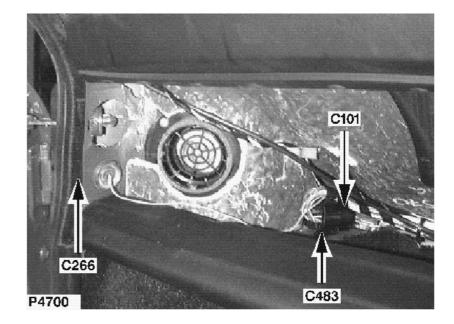
tablero

Interruptor de la puerta derecha Hembra NEGRO Detrás del lado derecho del

Cav	Col	Cct
1	PW	ALL

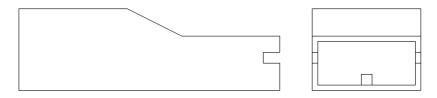


LH door switch Female BLACK LH 'A' post



(NL)

Linker portier-schakelaar Vrouwelijk ZWART Linker 'A' stijl



AAU1010

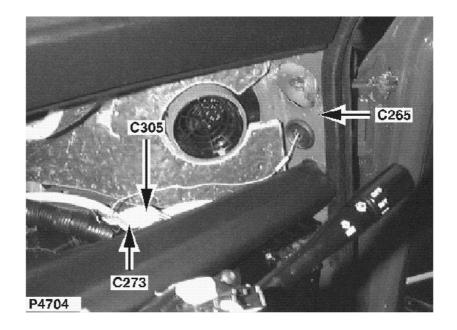


Interruptor de la puerta izquierda Hembra NEGRO Pilar A izquierdo

Cav	Col	Cct
1	PW	ALL

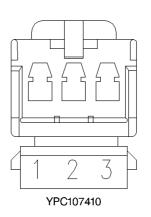


Main Harness to Airbag Harness Female YELLOW Behind RH side of fascia





Hoofdkabelbundel naar airbag-kabelbundel Vrouwelijk GEEL Achter rechterkant dashboard



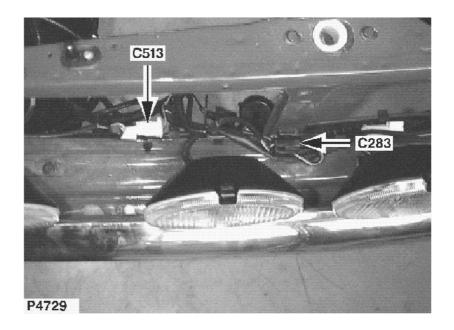


Mazo de cables principal al mazo de cables del airbag Hembra AMARILLO Detrás del lado derecho del tablero

Cav	Col	Cct
1	G	ALL
2	Р	ALL
3	YK	ALL

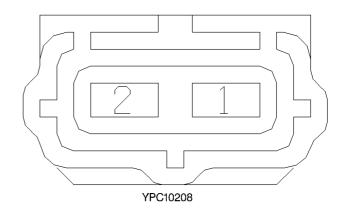


RH driving lamp Female BLUE Behind the front grille





Rechter rijlamp Vrouwelijk BLAUW Achter voor-grille



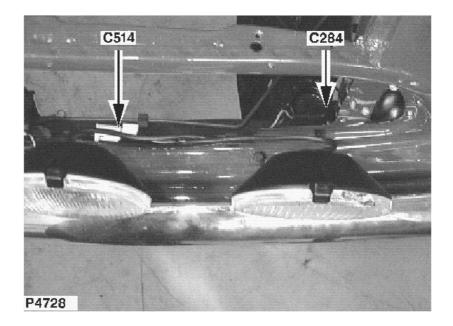


Faro antiniebla derecho Hembra AZUL Detrás de la rejilla delantera

Cav	Col	Cct
1	UY	ALL
2	В	ALL

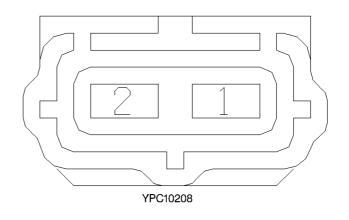


LH driving lamp Female BLUE Behind the front grille





Linker rijlamp Vrouwelijk BLAUW Achter voor-grille



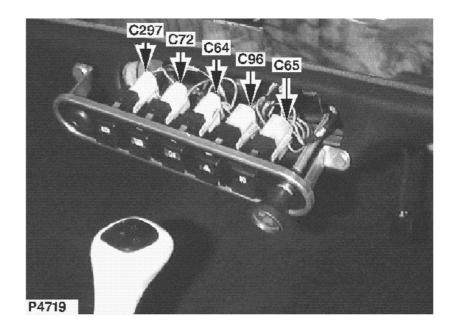


Faro antiniebla izquierdo Hembra AZUL Detrás de la rejilla delantera

Cav	Col	Cct
1	UY	ALL
2	В	ALL

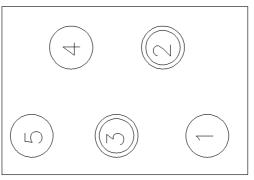


Brake test switch Female NATURAL Behind centre of fascia



NL

Remtest-schakelaar Vrouwelijk NATUREL achter middelste gedeelte dashboard



13H9745

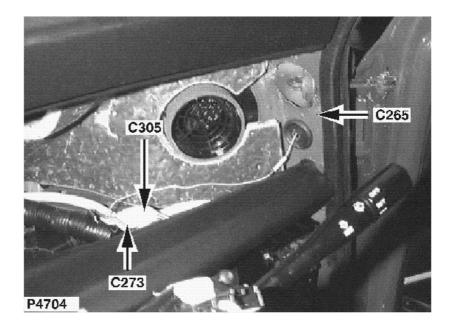


Interruptor de prueba de frenos Hembra NATURAL detrás de la parte central del tablero

Cav	Col	Cct
2	BW	ALL
3	В	ALL

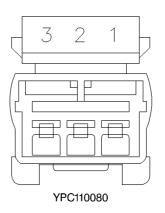


Airbag Harness to Main Harness Male YELLOW Behind RH side of fascia





Airbag-kabelbundel naar hoofdkabelbundel Mannelijk GEEL Achter rechterkant dashboard



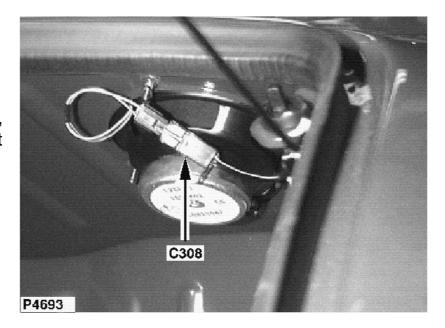


Mazo de cables del airbag al mazo de cables principal Macho AMARILLO Detrás del lado derecho del tablero

Cav	Col	Cct
1	G	ALL
2	Р	ALL
3	YK	ALL

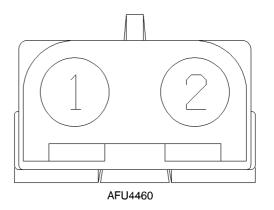


RH rear speaker Female BLACK Inside luggage compartment, below RH parcel tray support





Rechter achterste luidspreker Vrouwelijk ZWART In bagageruimte, onder rechter steun van pakjesplank



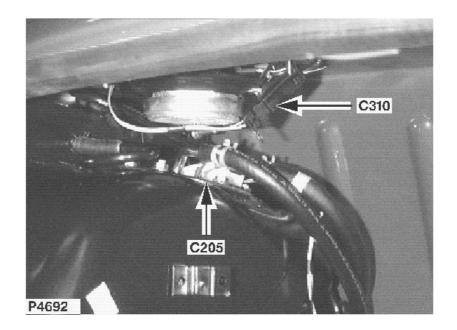


Altavoz trasero derecho Hembra NEGRO Interior del maletero, debajo del soporte derecho de la bandeja trasera

Cav	Col	Cct
1	SB	ALL
2	SK	ALL

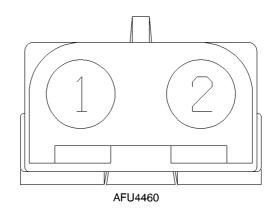


LH rear speaker Female BLACK Luggage compartment - LH side



NL

Linker achterste luidspreker Vrouwelijk ZWART bagageruimte - Links



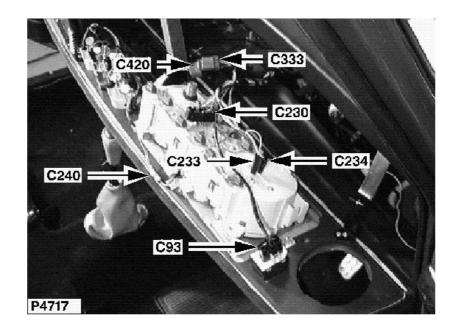


Altavoz trasero izquierdo Hembra NEGRO maletero - Lado izquierdo

Cav	Col	Cct
1	UB	ALL
2	UK	ALL

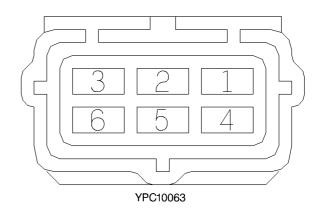


Main Harness to Instrument Link Harness Female BLACK Behind RH side of fascia



(NL)

Hoofdkabelbundel naar verbindingskabelbundel voor instrumenten Vrouwelijk ZWART Achter rechterkant dashboard



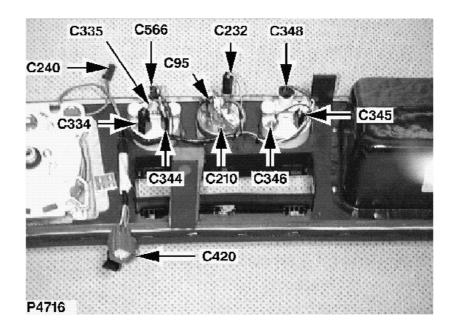
(E)

Mazo de cables principal al mazo de cables de instrumentos Hembra NEGRO Detrás del lado derecho del tablero

Cav	Col	Cct
1	N	ALL
2	РО	ALL
3	W	ALL
4	RW	ALL
5	В	ALL

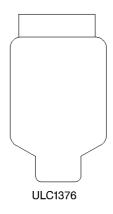


Oil temperature gauge Male BLACK Behind centre of fascia





OLIETEMPERATUURMETE R Mannelijk ZWART achter middelste gedeelte dashboard



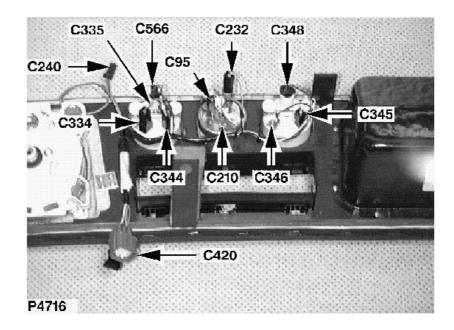


INDICADOR DE
TEMPERATURA DEL
ACEITE
Macho
NEGRO
detrás de la parte central del
tablero

Cav	Col	Cct
1	NU	ALL

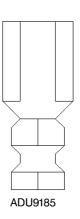


Oil temperature gauge Female PHOS-BRON Behind centre of fascia



NL

OLIETEMPERATUURMETE R Vrouwelijk FOSFORBRONS achter middelste gedeelte dashboard



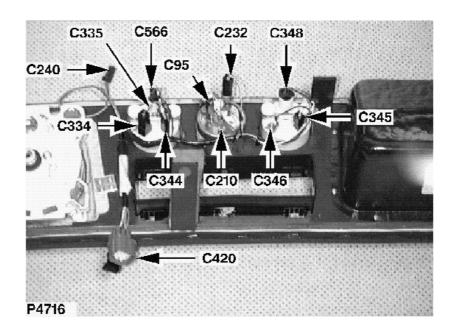
E

INDICADOR DE
TEMPERATURA DEL
ACEITE
Hembra
BRONCE FOSFOROSO
detrás de la parte central del
tablero

Cav	Col	Cct
1	В	ALL



Oil temperature gauge Female BLACK Behind centre of fascia

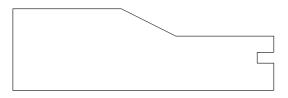


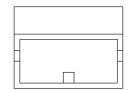


OLIETEMPERATUURMETE

R

Vrouwelijk ZWART achter middelste gedeelte dashboard





AAU1010

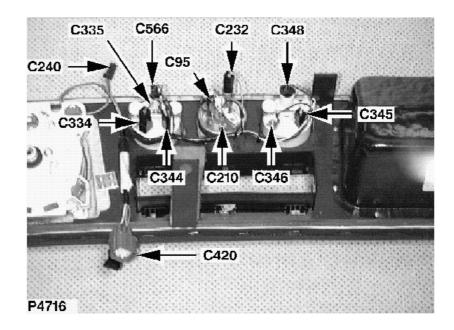


INDICADOR DE
TEMPERATURA DEL
ACEITE
Hembra
NEGRO
detrás de la parte central del
tablero

Cav	Col	Cct
1	V	ALL

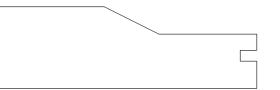


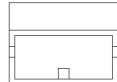
Voltage gauge Female BLACK Behind centre of fascia



(NL)

Spanningsmeter Vrouwelijk ZWART achter middelste gedeelte dashboard





AAU1010

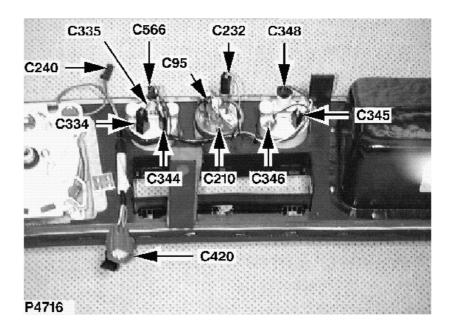


Indicador de tensión Hembra NEGRO detrás de la parte central del tablero

Cav	Col	Cct
1	V	ALL

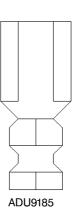


Voltage gauge Female PHOS-BRON Behind centre of fascia





Spanningsmeter Vrouwelijk FOSFORBRONS achter middelste gedeelte dashboard



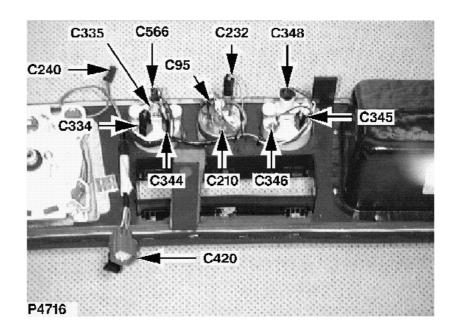


Indicador de tensión Hembra BRONCE FOSFOROSO detrás de la parte central del tablero

Cav	Col	Cct
1	В	ALL



Voltage gauge Female BLACK Behind centre of fascia



(NL)

Spanningsmeter Vrouwelijk ZWART achter middelste gedeelte dashboard

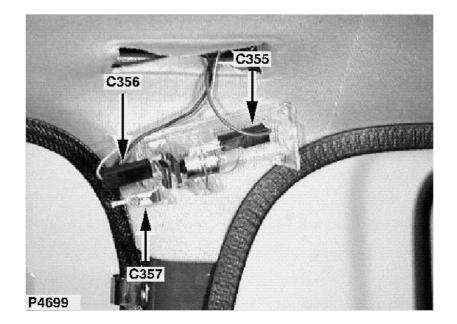


Indicador de tensión Hembra NEGRO detrás de la parte central del tablero

Cav	Col	Cct
1	RW	ALL
2	В	ALL

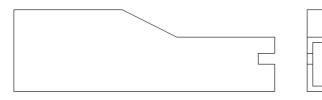


Interior lamp unit Female BLACK Behind ultrasonic sensor



(NL)

Interieurverlichting lampeenheid Vrouwelijk ZWART Achter ultrasonische sensor



AAU1010

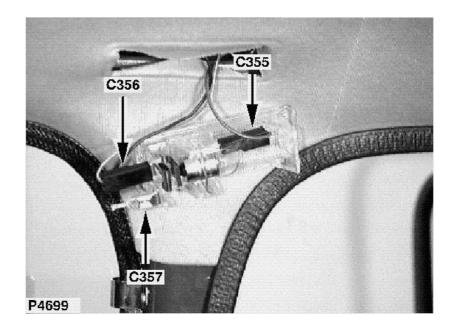


Unidad de luces interiores Hembra NEGRO Detrás del sensor ultrasónico

Cav	Col	Cct
1	РО	ALL

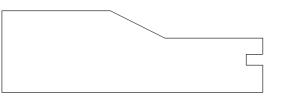


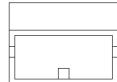
Interior lamp unit Female BLACK Behind ultrasonic sensor



(NL)

Interieurverlichting lampeenheid Vrouwelijk ZWART Achter ultrasonische sensor





AAU1010

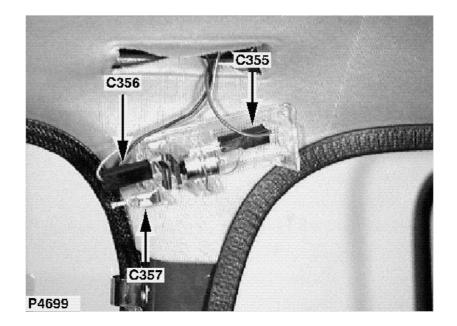


Unidad de luces interiores Hembra NEGRO Detrás del sensor ultrasónico

Cav	Col	Cct
1	PW	ALL

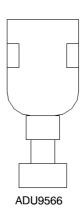


Interior lamp unit Female BRASS, TIN-PLATED Behind ultrasonic sensor



(NL)

Interieurverlichting lampeenheid Vrouwelijk KOPER Achter ultrasonische sensor



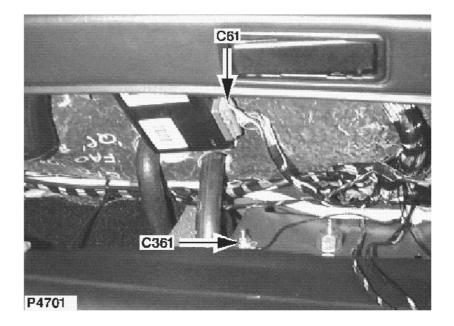


Unidad de luces interiores Hembra LATON Detrás del sensor ultrasónico

Cav	Col	Cct
1	В	ALL

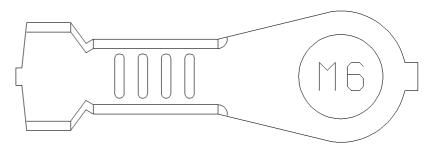


Radio earth
Eyelet
TIN-PLATE
Behind centre of fascia



(NL)

Radio - massa Oogje VERTIND achter middelste gedeelte dashboard



YPG10003

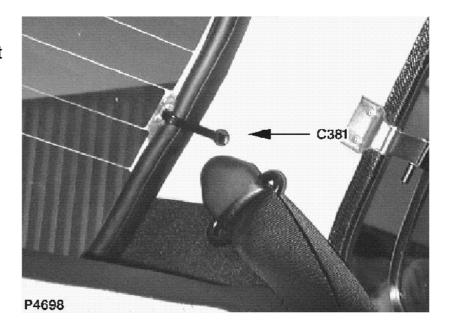


Masa de radio Ollao PLACA ESTAÑO detrás de la parte central del tablero

Cav	Col	Cct
1	В	ALL

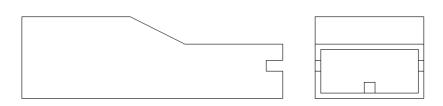


Heated rear window element Female BLACK LH rear quarter trim panel





Verwarmde achterruit verwarmingselement Vrouwelijk ZWART Linker achterste kwartbekledingspaneel



AAU1010

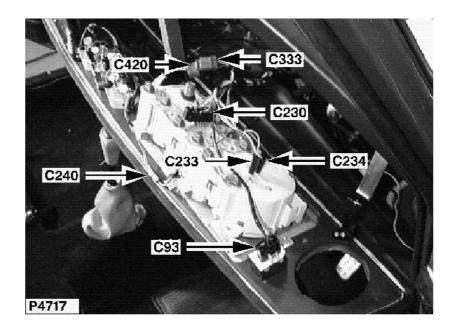


Elemento de luneta térmica Hembra NEGRO Guarnecido lateral trasero izquierdo

Cav	Col	Cct
1	Ϋ́	ALL

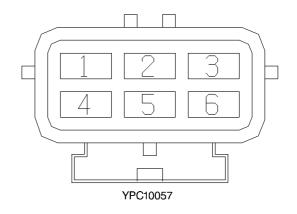


Instrument Link Harness to Main Harness Male BLACK Behind RH side of fascia





Verbindingskabelbundel voor instrumenten naar hoofdkabelbundel Mannelijk ZWART Achter rechterkant dashboard



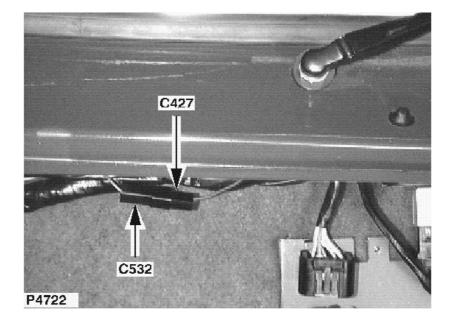


Mazo de cables de enlace de instrumentos al mazo de cables principal Macho NEGRO Detrás del lado derecho del tablero

Cav	Col	Cct
1	NU	ALL
2	РО	ALL
3	W	ALL
4	RW	ALL
5	В	ALL

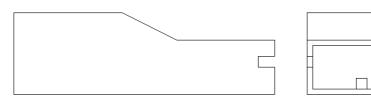


Main Harness to Fog Lamp Harness Female BLACK Top of bulkhead - centre





Hoofdkabelbundel naar kabelbundel voor mistlampen Vrouwelijk ZWART Bovenkant schutbord midden



AAU1010



Mazo de cables principal al mazo de cables de luces antiniebla

Hembra

NEGRO

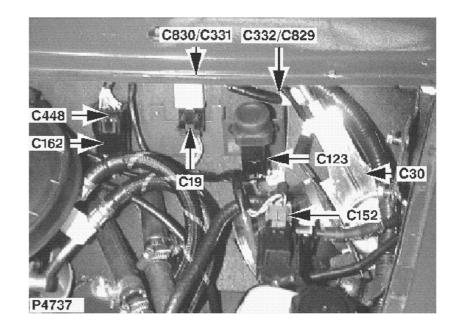
Parte superior del salpicadero

- centro

Cav	Col	Cct
1	RB	ALL

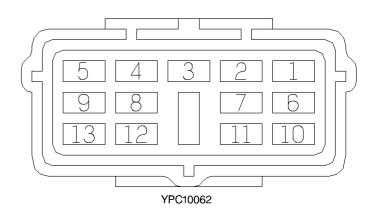


Main Harness to Engine Harness Female BLACK LH side of bulkhead



(NL)

Hoofdkabelbundel naar motor-kabelbundel Vrouwelijk ZWART Linkerkant tussenschot



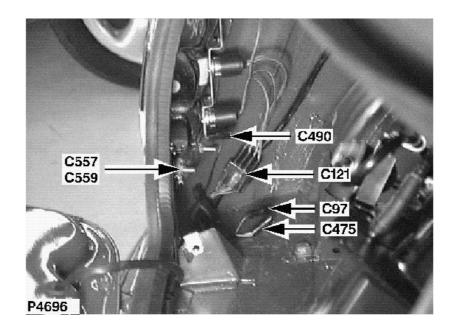


Mazo de cables principal al mazo de cables motor Hembra NEGRO Lado izquierdo del salpicadero

Cav	Col	Cct	Cav	Col	Cct
1	W	ALL	7	NY	ALL
2	WR	ALL	8	WN	ALL
3	G	ALL	9	LGB	ALL
4	NS	ALL	10	WR	ALL
5	WS	ALL	11	WY	ALL
6	WB	ALL	12	NU	ALL

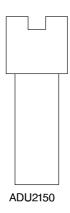


Rear fog lamp Male BLACK Luggage compartment - LH side



(NL)

Mistachterlamp Mannelijk ZWART bagageruimte - Links



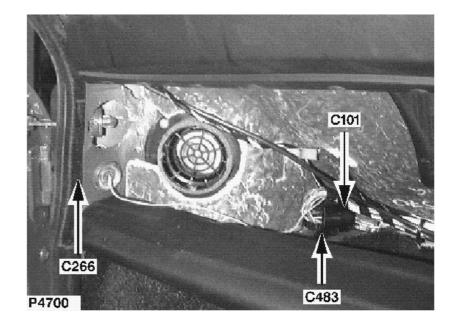


Piloto antiniebla trasero Macho NEGRO maletero - Lado izquierdo

Cav	Col	Cct
1	UY	ALL

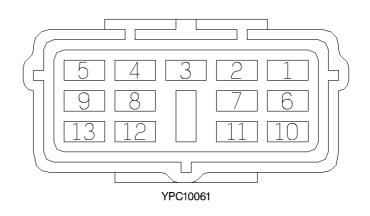


Main Harness to Body Harness Female BLACK LH 'A' post



(NL)

Hoofdkabelbundel naar carrosserie-kabelbundel Vrouwelijk ZWART Linker 'A' stijl



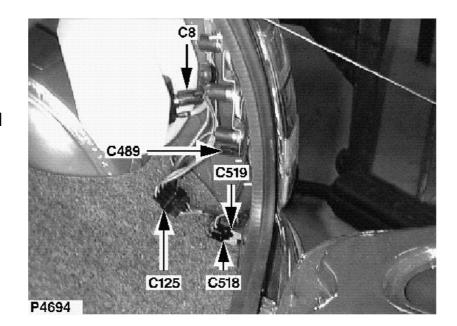


Mazo de cables principal al mazo de cables de la carrocería Hembra NEGRO Pilar A izquierdo

Cav	Col	Cct	Cav	Col	Cct
1	GP	ALL	7	GB	ALL
2	UY	ALL	9	PK	ALL
3	GN	ALL	10	WP	ALL
4	8 G	ALL	11	OR	ALL
5	GR	ALL	12	RW	ALL
6	RB	ALL	13	GY	ALL



RH brake lamp Female BLACK Luggage compartment - RH side



(NL)

Rechter remlicht Vrouwelijk ZWART bagageruimte - Rechts





AAU1010

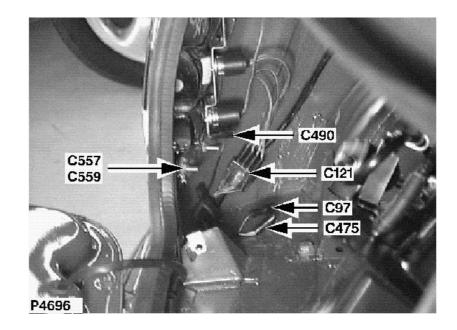


Luz de pare derecha Hembra NEGRO maletero - Lado derecho

Cav	Col	Cct
1	В	ALL

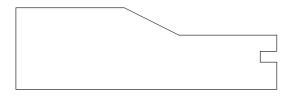


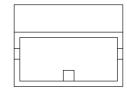
LH brake lamp Female BLACK Luggage compartment - LH side



(NL)

Linker remlicht Vrouwelijk ZWART bagageruimte - Links





AAU1010

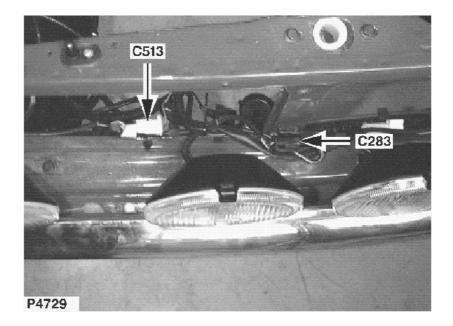


Luz de pare izquierda Hembra NEGRO maletero - Lado izquierdo

Cav	Col	Cct
1	В	ALL

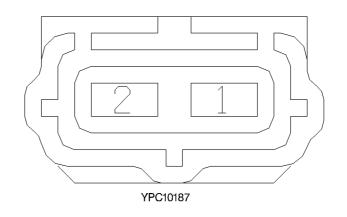


RH front fog lamp Female WHITE Behind the front grille





Rechter voorste mistlamp Vrouwelijk WIT Achter voor-grille



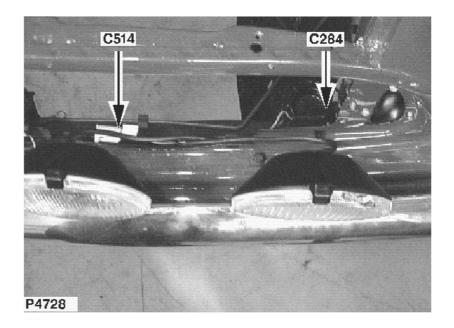


Piloto antiniebla delantero derecho Hembra BLANCO Detrás de la rejilla delantera

Cav	Col	Cct
1	UG	ALL
2	В	ALL

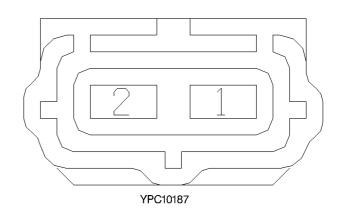


LH front fog lamp Female WHITE Behind the front grille



(NL)

Linker voorste mistlamp Vrouwelijk WIT Achter voor-grille



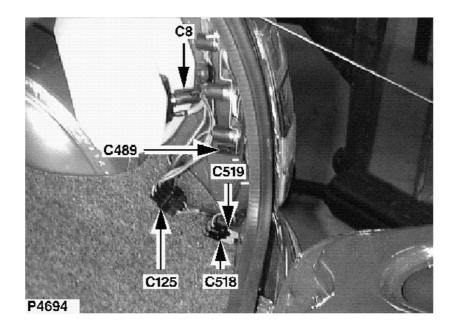
E

Faro antiniebla delantero izquierdo Hembra BLANCO Detrás de la rejilla delantera

Cav	Col	Cct
1	G	ALL
2	В	ALL

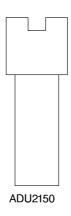


RH rear fog lamp Male BLACK Luggage compartment - RH side





Rechter mistachterlamp Mannelijk ZWART bagageruimte - Rechts



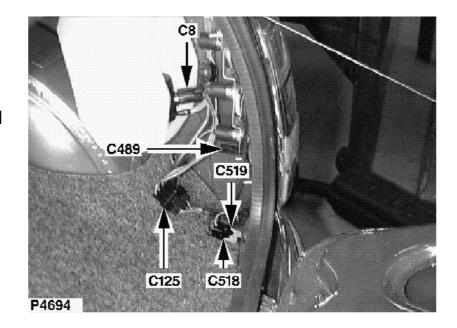


Piloto antiniebla trasero derecho Macho NEGRO maletero - Lado derecho

Cav	Col	Cct
1	В	ALL

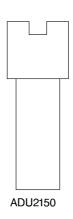


RH rear fog lamp Male BLACK Luggage compartment - RH side



(NL)

Rechter mistachterlamp Mannelijk ZWART bagageruimte - Rechts



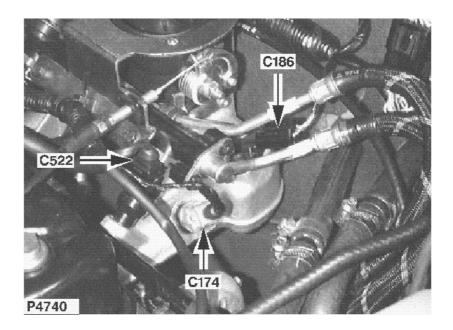
(E)

Piloto antiniebla trasero derecho Macho NEGRO maletero - Lado derecho

Cav	Col	Cct
1	UΥ	ALL

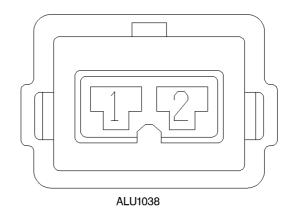


Injectors
Female
BLACK
Top rear of engine - centre





Verstuivers Vrouwelijk ZWART boven/achterkant motor midden



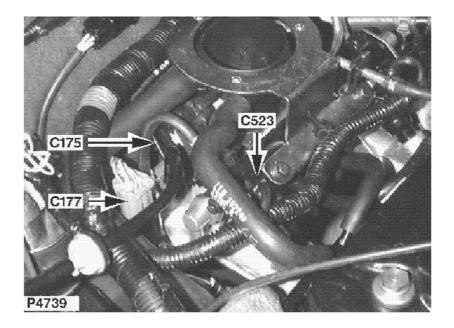


Inyectores
Hembra
NEGRO
parte superior trasera del motor - centro

Cav	Col	Cct
1	NK	ALL
2	ΥN	ALL

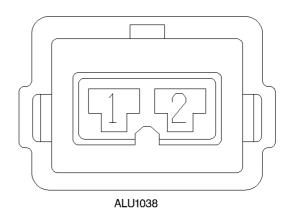


Injectors
Female
BLACK
Top rear of engine - centre





Verstuivers Vrouwelijk ZWART boven/achterkant motor midden



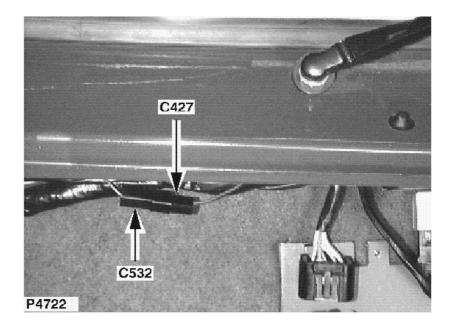


Inyectores
Hembra
NEGRO
parte superior trasera del motor - centro

Cav	Col	Cct
1	NK	ALL
2	YR	ALL

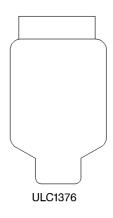


Fog Lamp Harness to Main Harness Male BLACK Top of bulkhead - centre





Mistlamp-kabelbundel naar hoofdkabelbundel Mannelijk ZWART Bovenkant schutbord midden





Mazo de cables de luces antiniebla al mazo de cables principal Macho

NEGRO

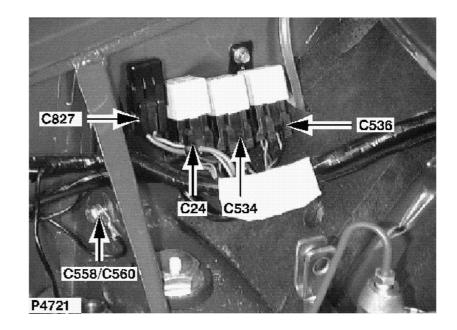
Parte superior del salpicadero

- centro

Cav	Col	Cct
1	RB	ALL

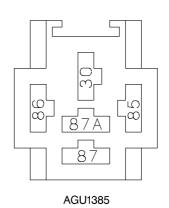


Driving lamp relay Female BLACK Rear RH side of engine compartment



(NL)

Rijlampen - relais Vrouwelijk ZWART Rechter achterkant motorcompartiment



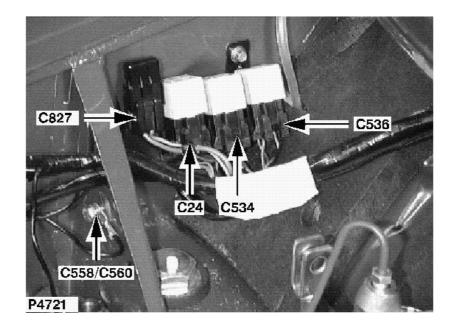


Relé de faros supletorios Hembra NEGRO Parte trasera derecha del compartimento motor

Cav	Col	Cct
30	UY	ALL
85	UW	ALL
86	В	ALL
87	Р	ALL

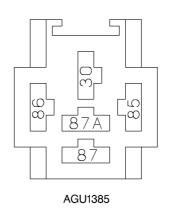


Direction indicator relay Female BLACK Rear RH side of engine compartment





Richtingaanwijzers - relais Vrouwelijk ZWART Rechter achterkant motorcompartiment



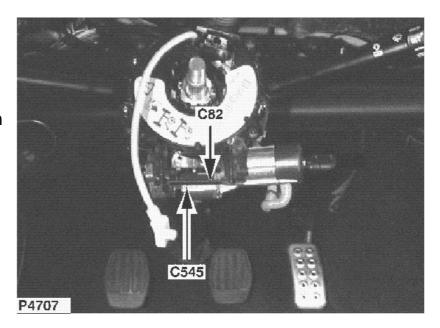


Relé de intermitentes de dirección Hembra NEGRO Parte trasera derecha del compartimento motor

Cav	Col	Cct
30	LGK	ALL
85	В	ALL
86	G	ALL
87	LGN	ALL

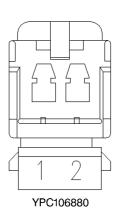


Rotary coupler Female YELLOW Underside of steering column



(NL)

ROTERENDE KOPPELING Vrouwelijk GEEL onderkant van stuurkolom



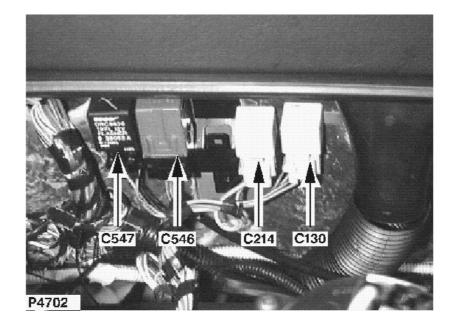
E

ACOPLADOR GIRATORIO Hembra AMARILLO parte inferior de la columna de dirección

Cav	Col	Cct
1	R	ALL
2	Υ	ALL

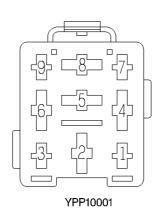


Front wiper control unit Female BLACK Behind centre of fascia





Voorruitwissers regeleenheid Vrouwelijk ZWART achter middelste gedeelte dashboard



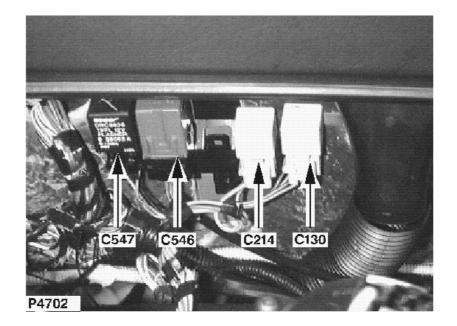


Unidad de control de limpiaparabrisas Hembra NEGRO detrás de la parte central del tablero

Cav	Col	Cct
2	NLG	ALL
4	В	ALL
5	NLG	ALL
6	OR	ALL
7	LG	ALL
8	LGO	ALL

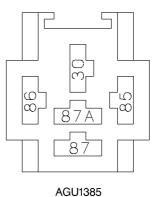


Direction indicator/hazard warning unit **Female BLACK** Behind centre of fascia





Richtingaanwijzers/alarmknip perlichten Vrouwelijk **ZWART** achter middelste gedeelte dashboard



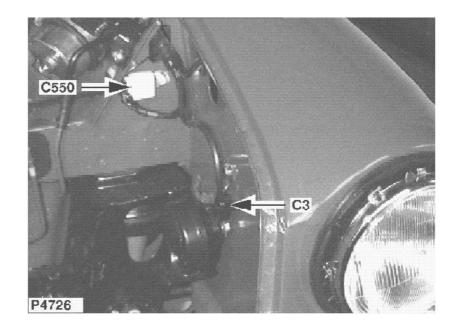


Central de intermitentes de dirección/emergencia Hembra **NEGRO** detrás de la parte central del tablero

Cav	Col	Cct
85	РО	ALL
86	В	ALL
87	LGK	ALL

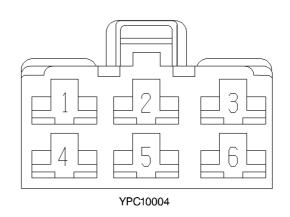


Earth header Female NATURAL LH side of engine compartment





Massa - stootrand Vrouwelijk NATUREL Linkerkant motorcompartiment



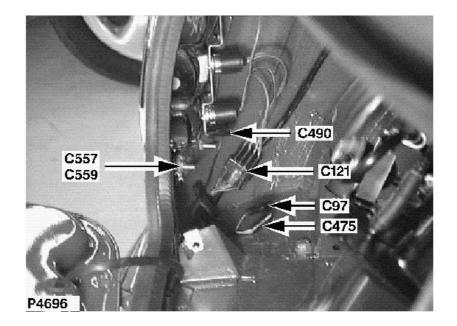


Unión de convergencia a masa Hembra NATURAL Lado izquierdo del compartimento motor

Cav	Col	Cct
1	В	ALL
2	В	ALL
3	В	ALL
4	В	ALL
5	В	ALL
6	В	ALL

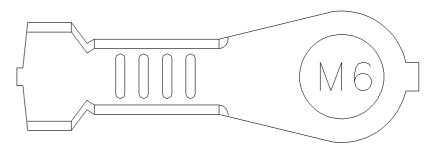


Earth Eyelet
Eyelet
TIN-PLATE
Luggage compartment - LH
side



(NL)

Massa - oog-aansluiting Oogje VERTIND bagageruimte - Links



YPG10014

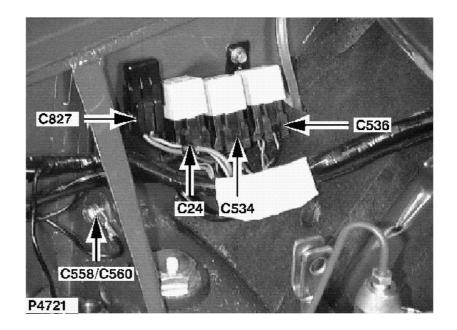


Ollao de masa Ollao PLACA ESTAÑO maletero - Lado izquierdo

Cav	Col	Cct
1	В	ALL

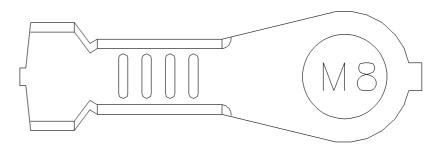


Earth Eyelet Eyelet TIN-PLATE RH side of engine compartment





Massa - oog-aansluiting Oogje VERTIND Rechterkant motorcompartiment



YPG10016

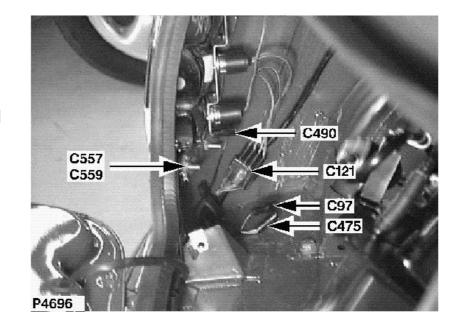


Ollao de masa Ollao PLACA ESTAÑO Lado derecho del compartimento motor

Cav	Col	Cct
1	В	ALL

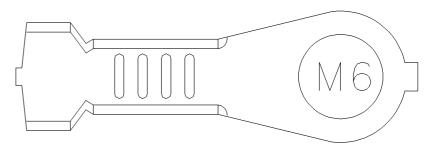


Earth Eyelet Eyelet TIN-PLATE Luggage compartment - LH side



(NL)

Massa - oog-aansluiting Oogje VERTIND bagageruimte - Links



YPG10014

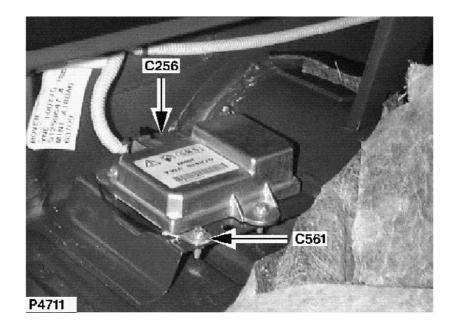


Ollao de masa Ollao PLACA ESTAÑO maletero - Lado izquierdo

Cav	Col	Cct
1	В	ALL

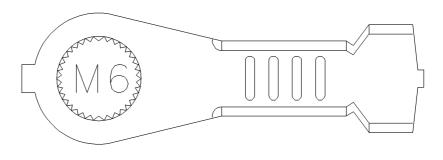


Earth 6
Eyelet
TIN-PLATE
Beneath rear seat





Massa 6 Oogje VERTIND Onder achterbank



YPG100830

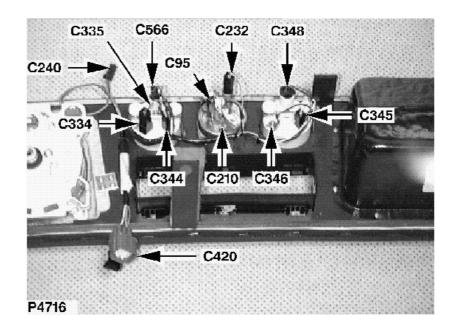


Masa 6 Ollao PLACA ESTAÑO Debajo del asiento trasero

Cav	Col	Cct
1	В	ALL



Oil temperature gauge Female BLACK Behind centre of fascia



(NL)

OLIETEMPERATUURMETE R Vrouwelijk ZWART achter middelste gedeelte dashboard

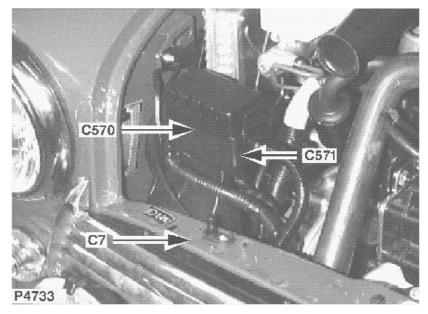


INDICADOR DE
TEMPERATURA DEL
ACEITE
Hembra
NEGRO
detrás de la parte central del
tablero

Cav	Col	Cct
1	RW	ALL
2	В	ALL

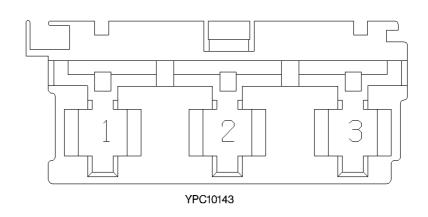


Engine compartment fusebox Female BLACK Top of engine - RH side





Zekeringenkastje in motorcompartiment Vrouwelijk ZWART bovenkant motor - Rechts



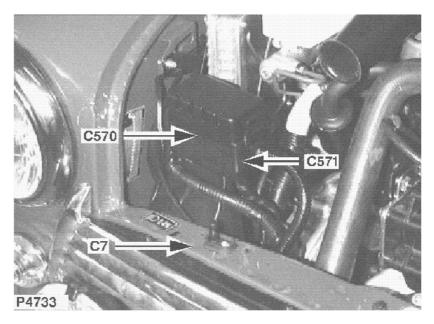


Caja de fusibles del compartimento motor Hembra NEGRO parte superior del motor -Lado derecho

Cav	Col	Cct
1	Ν	ALL
2	Ν	ALL
3	N	ALL

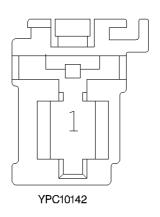


Engine compartment fusebox Female BLACK Top of engine - RH side





Zekeringenkastje in motorcompartiment Vrouwelijk ZWART bovenkant motor - Rechts



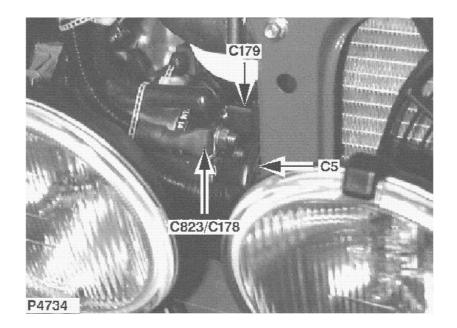


Caja de fusibles del compartimento motor Hembra NEGRO parte superior del motor -Lado derecho

Cav	Col	Cct
1	Ν	ALL

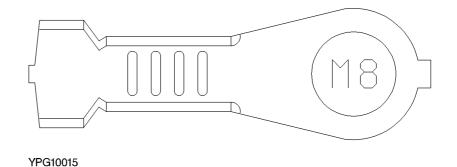


Starter
Eyelet
TIN-PLATE
Lower front of engine - RH
side





Startmotor
Oogje
VERTIND
Onder/voorkant motor Rechts



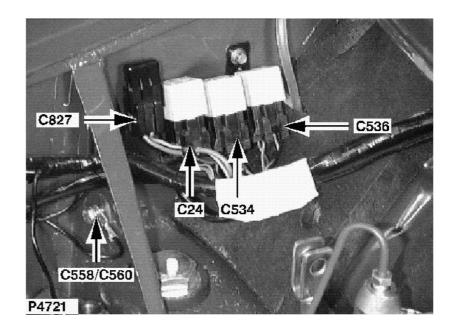


Motor de arranque Ollao PLACA ESTAÑO Parte delantera inferior del motor - Lado derecho

Cav	Col	Cct
1	Z	ALL

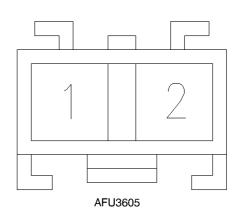


Fuse holder Female TIN-PLATE Rear RH side of engine compartment



(NL)

Zekeringhouder Vrouwelijk VERTIND Rechter achterkant motorcompartiment



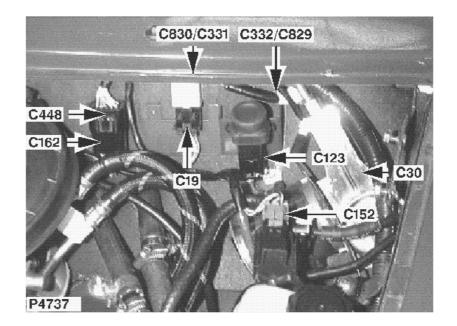


Portafusibles
Hembra
PLACA ESTAÑO
Parte trasera derecha del compartimento motor

Cav	Col	Cct
1	PU	ALL
2	Ν	ALL

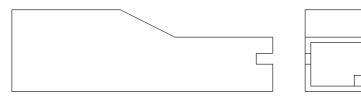


Fog Lamp Link Harness Female BLACK LH side of bulkhead





Verbindingskabelbundel voor mistlampen Vrouwelijk ZWART Linkerkant tussenschot



AAU1010

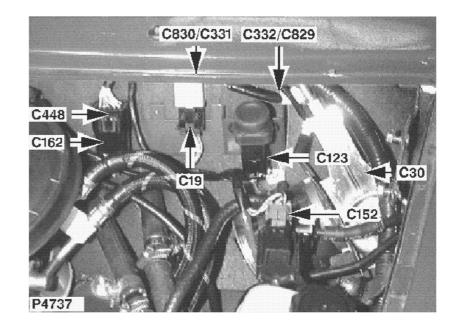


Mazo de cables de enlace de luces antiniebla Hembra NEGRO Lado izquierdo del salpicadero

Cav	Col	Cct
1	UW	ALL

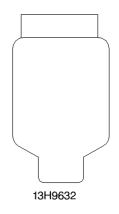


Fog Lamp Link Harness Male NATURAL LH side of bulkhead





Verbindingskabelbundel voor mistlampen Mannelijk NATUREL Linkerkant tussenschot



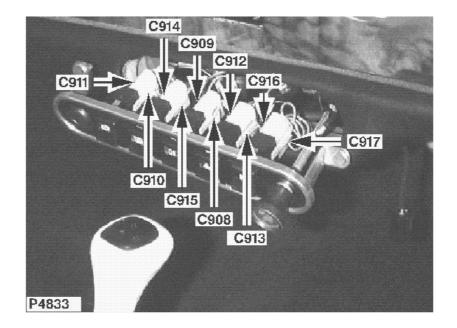


Mazo de cables de enlace de luces antiniebla Macho NATURAL Lado izquierdo del salpicadero

Cav	Col	Cct
1	UB	ALL

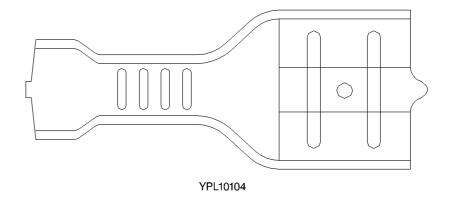


Rear fog lamp switch Female BRASS Behind centre of fascia





Mistachterlamp - schakelaar Vrouwelijk KOPER achter middelste gedeelte dashboard



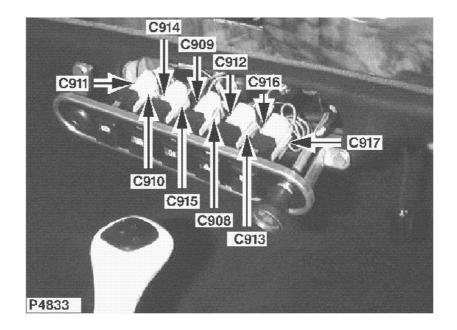


Interruptor de pilotos antiniebla traseros Hembra LATON detrás de la parte central del tablero

Cav	Col	Cct
1	UY	ALL

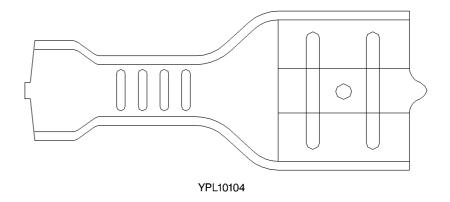


Rear fog lamp switch Female BRASS Behind centre of fascia



(NL)

Mistachterlamp - schakelaar Vrouwelijk KOPER achter middelste gedeelte dashboard



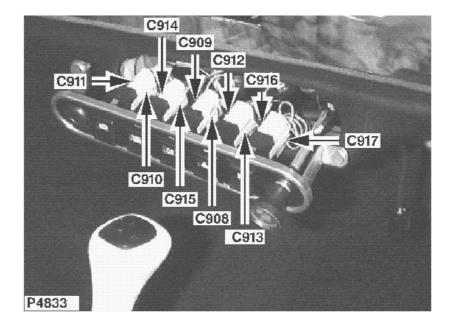


Interruptor de pilotos antiniebla traseros Hembra LATON detrás de la parte central del tablero

Cav	Col	Cct
1	В	ALL

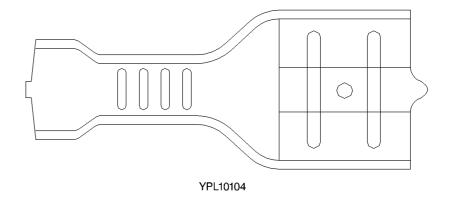


Brake system warning light Female BRASS Behind centre of fascia



(NL)

Remsysteem waarschuwingslampje Vrouwelijk KOPER achter middelste gedeelte dashboard



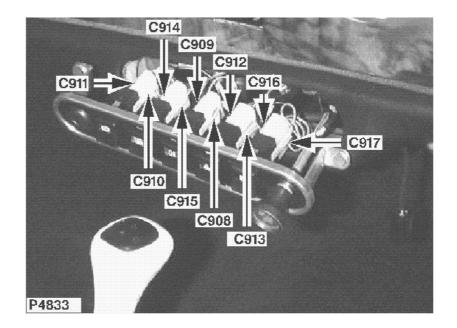


Luz testigo del sistema de frenos Hembra LATON detrás de la parte central del tablero

Cav	Col	Cct
1	РО	ALL

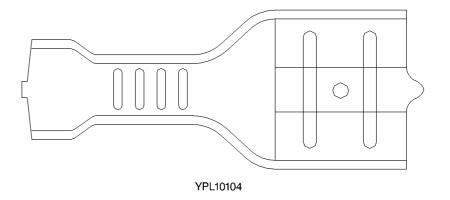


Brake system warning light Female BRASS Behind centre of fascia



(NL)

Remsysteem waarschuwingslampje Vrouwelijk KOPER achter middelste gedeelte dashboard



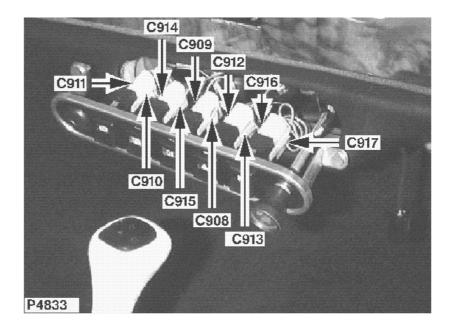


Luz testigo del sistema de frenos Hembra LATON detrás de la parte central del tablero

Cav	Col	Cct
1	BW	ALL

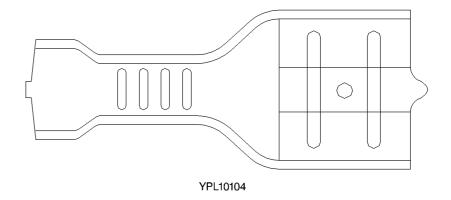


Hazard warning light Female BRASS Behind centre of fascia



NL

Alarmknipperlicht Vrouwelijk KOPER achter middelste gedeelte dashboard



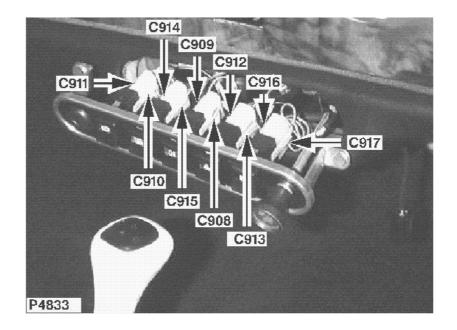


Luz intermitente de emergencia Hembra LATON detrás de la parte central del tablero

Cav	Col	Cct
1	В	ALL

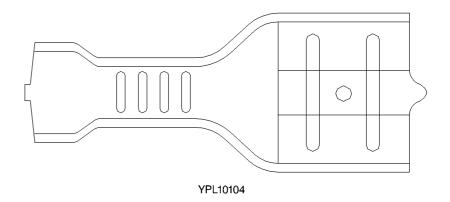


Hazard warning light Female BRASS Behind centre of fascia



NL

Alarmknipperlicht Vrouwelijk KOPER achter middelste gedeelte dashboard



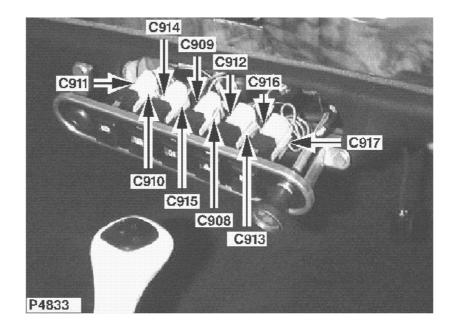
(E)

Luz intermitente de emergencia Hembra LATON detrás de la parte central del tablero

Cav	Col	Cct
1	GLG	ALL

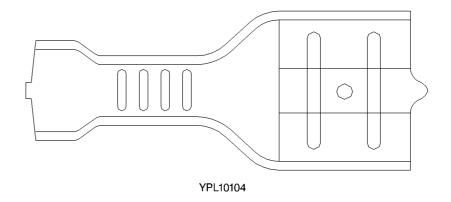


Heated rear window switch Female BRASS Behind centre of fascia



(NL)

Verwarmde achterruit schakelaar Vrouwelijk KOPER achter middelste gedeelte dashboard



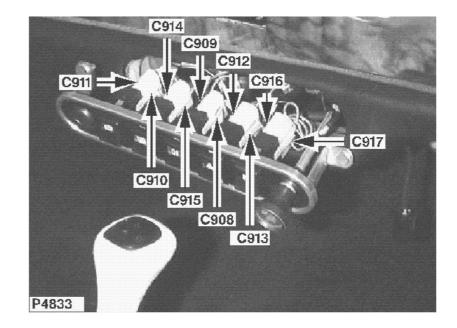


Interruptor de luneta térmica Hembra LATON detrás de la parte central del tablero

Cav	Col	Cct
1	В	ALL

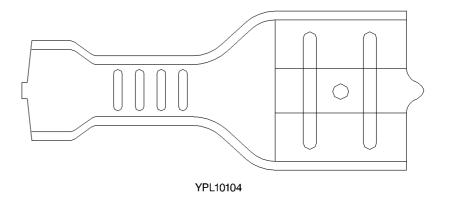


Heated rear window switch Female BRASS Behind centre of fascia



(NL)

Verwarmde achterruit schakelaar Vrouwelijk KOPER achter middelste gedeelte dashboard



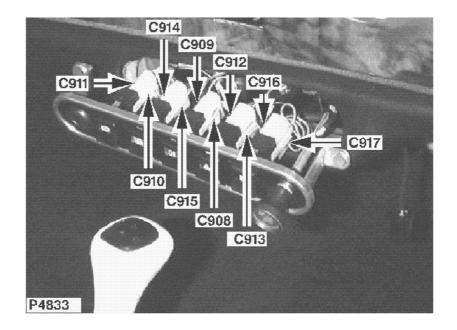
E

Interruptor de luneta térmica Hembra LATON detrás de la parte central del tablero

Cav	Col	Cct
1	Ϋ́	ALL

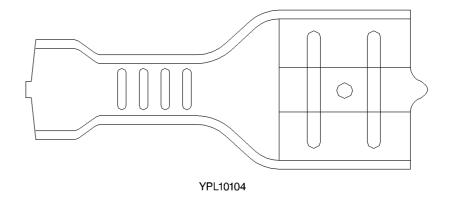


Front fog lamp switch Female BRASS Behind centre of fascia





Mistlamp voor - schakelaar Vrouwelijk KOPER achter middelste gedeelte dashboard



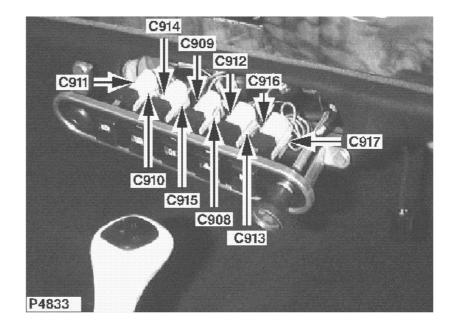


Interruptor de faros antiniebla delanteros Hembra LATON detrás de la parte central del tablero

Cav	Col	Cct
1	В	ALL

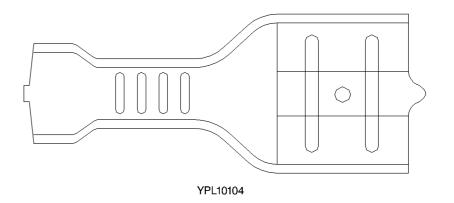


Front fog lamp switch Female BRASS Behind centre of fascia



(NL)

Mistlamp voor - schakelaar Vrouwelijk KOPER achter middelste gedeelte dashboard





Interruptor de faros antiniebla delanteros Hembra LATON detrás de la parte central del tablero

Cav	Col	Cct
1	G	ALL